



**Scaling Program Investments for Young Children Globally:  
Evidence from Latin America and the Caribbean: Summary of a  
Joint Workshop by the Institute of Medicine, the National  
Research Council, and Fundacao Maria Cecilia Souto Vidigal,  
Sao Paulo**

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# Scaling Program Investments for Young Children Globally: Evidence from Latin America and the Caribbean

Summary of a Joint Workshop by the Institute of Medicine, the National Research Council, and Fundação Maria Cecília Souto Vidigal, São Paulo

Deepali M. Patel and Sarah M. Tracey, *Rapporteurs*

Forum on Investing in Young Children Globally

Board on Children, Youth, and Families

Board on Global Health

INSTITUTE OF MEDICINE AND  
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America

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## Reviewers

This workshop summary has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published workshop summary as sound as possible and to ensure that the workshop summary meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this workshop summary:

**Mauricio L. Barreto**, The Collective Health Institute, Federal University of Bahia  
**Maria Elena Ubeda Castillo**, UNICEF  
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**Simon Sommer**, Jacobs Foundation

Although the reviewers listed above have provided many constructive comments and suggestions, they did not see the final draft of the workshop summary before its release. The review of this workshop summary was overseen by **Enriqueta C. Bond**, Burroughs Wellcome Fund. Appointed by the Institute of Medicine, she was responsible for making

certain that an independent examination of this workshop summary was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this workshop summary rests entirely with the rapporteurs and the institution.

## Acknowledgments

The planning committee and project staff deeply appreciate the many valuable contributions from individuals who assisted us with this project. First, we offer our profound thanks to all of the presenters and discussants at the workshop, who gave so generously their time and expertise. These individuals are listed in full in the workshop agenda in Appendix B. We are also grateful to the many participants who attended the workshop both in person and via the live webcast. The engagement of all those in attendance was robust and vital to the success of the event.

In addition, the forum wishes to recognize the sponsors that supported this activity. Financial support for this project was provided by Accordia Global Health Foundation; the Aga Khan Foundation; Autism Speaks; the Bernard van Leer Foundation; The Bill & Melinda Gates Foundation; the Fraser Mustard Institute for Human Development; Grand Challenges Canada; the Inter-American Development Bank; the Jacobs Foundation; the National Institutes of Health—Fogarty International Center, National Institute of Child Health and Human Development, and National Institute of Mental Health; Nestlé Nutrition Institute; Office of the Assistant Secretary for Planning and Evaluation (ASPE); the Open Society Institute–Budapest Foundation; the Society for Research in Child Development; UNICEF; U.S. Agency for International Development; U.S. Centers for Disease Control and Prevention; U.S. Department of State; Fundação Maria Cecília Souto Vidigal; the William and Flora Hewlett Foundation; and the World Bank.

### A NOTE ABOUT THE COVER ART

The Forum on Investing in Young Children Globally is committed to confronting the challenges and harnessing the opportunities surrounding the global nature of integrating the science of health, education, nutrition, and social protection. One of the ways the forum has committed itself to being global in scope is through the workshops that occur in different regions throughout the world. The cover design is intended to embrace the diversity in place, culture, challenges, and opportunities associated with forum activities at each of the workshops, but this global trajectory is done keeping in mind the momentum that comes in connecting these diverse locales to one another through the work of the forum. The bright orange dot represents the location of the workshop this report summarizes, and the lighter orange dots represent workshop locations across the first 3 years of the forum. The dotted orange line suggests that the forum will link what was gleaned from the convening activities from this workshop to the next. We would like to thank Jocelyn Widmer for her contributions to the cover design.

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# 1

## Introduction<sup>1</sup>

### **FORUM ON INVESTING IN YOUNG CHILDREN GLOBALLY OVERVIEW**

In January 2014, the Board on Children, Youth, and Families of the Institute of Medicine (IOM) and the National Research Council (NRC), in collaboration with the IOM Board on Global Health, launched the Forum on Investing in Young Children Globally (forum). At this meeting, the participants agreed to focus on creating and sustaining, over 3 years, an evidence-driven community of stakeholders that aims to explore existing, new, and innovative science and research from around the world and translate this evidence into sound and strategic investments in policies and practices that will make a difference in the lives of children and their caregivers. Forum activities will highlight the science and economics of integrated investments in young children living in low-resourced regions of the world across the areas of health, nutrition, education, and social protection. As a result, the forum will explore a holistic view of children and caregivers by integrating analyses and disciplines that span from neurons to neighborhoods and discuss the science from the microbiome

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<sup>1</sup> The planning committee's role was limited to planning the workshop. The workshop summary has been prepared by the rapporteurs (with the assistance of Kimber Bogard) as a factual account of what occurred at the workshop. Statements, recommendations, and opinions expressed are those of individual presenters and participants and are not necessarily endorsed or verified by the IOM. They should not be construed as reflecting any group consensus.

to culture. Moreover, the forum will support an integrative vision to strengthen human capital. This work will be done through the forum and will engage in a series of stakeholder consultative sessions or public workshops, each focusing on specific aspects of science integration, bridging equity gaps, and implementing and scaling evidence-informed efforts.

A set of forum goals includes supporting the development of integrated science on children's health, nutrition, education, and social protection and working with policy makers, practitioners, and researchers to raise awareness of integrated approaches to improve the lives of children and their caregivers. Forum objectives to meet these goals are expected to accomplish the following:

1. Shape a global vision of healthy child development across cultures and contexts, extending from preconception through at least age 8, and across currently siloed areas of health, nutrition, education, and social protection.
2. Identify opportunities for intersectoral coordination among researchers, policy makers, implementers, practitioners, and advocates to improve quality practices in public and private settings and bring these practices to scale, in the context of the economics of strategic, integrated investing in young children.
3. Inform ongoing conversations and activities of groups working on issues related to young children globally such as the sustainable development goals and indicators being developed.
4. Identify current models of program and policy financing across health, education, nutrition, and social protection, within the framework of reproductive, maternal, newborn, and child health that aim to improve children's developmental potential. This information could be used to illuminate opportunities for new financing structures and forms of investments that may be more effective in improving child outcomes and potentially drive economic development.

### WORKSHOP FRAMING

The forum's first workshop, "The Cost of Inaction," was held in Washington, DC, in April 2014 and focused on the science of promoting optimal development through investing in young children and the potential economic consequences of inaction. In August 2014, the forum hosted its second workshop, in New Delhi, India, focusing on financing investments for young children, and highlighted opportunities and barriers for financing.

The third workshop, and the subject of this summary, was held in

São Paulo, Brazil, on November 11, 2014, and focused on scaling program investments for young children globally. It touched on four broad domains: impact, scalability, sustainability, and governance. Constanza Alarcón, chair of the workshop planning committee, noted four goals of the workshop in her opening statements:

1. The exploration of the impact of programs and their cost-effectiveness, and types of investment that could support both
2. A discussion of how to progress from pilot testing to implementation of public policy, including maintaining quality
3. Clarification of criteria for ensuring sustainability of programs and their funding
4. Examination of potential steps toward institutionalization and governance of policies and architecture of programs focused on young children

A complete statement of task of this workshop is shown in Box 1-1.

#### **BOX 1-1 Statement of Task**

The Institute of Medicine and the National Research Council, in partnership with Fundação Maria Cecília Souto Vidigal in São Paulo, Brazil, is pleased to announce a new workshop on Scaling Program Investments for Young Children Globally: A Workshop on Evidence from Latin America and the Caribbean. An ad hoc committee will plan and conduct an interactive public workshop featuring presentations and discussions that highlight efforts made to scale program investments across health, education, nutrition, and social protection that aim to improve children's developmental potential. Speakers will explore four topics around scaling up program investments: (1) evidence of impact for effective models; (2) scalability of program models; (3) sustainability of programs; and (4) governance.

A set of research presentations will synthesize up-to-date evidence on effective programs and interventions in Latin America and other regions, including an account of their strengths and challenges. Speakers will address scalability and sustainability of program investments and how to maintain quality at scale, with a focus on approaches in culturally and ethnically diverse contexts and issues of decentralization, local capacity, and information systems for monitoring and evaluation. Presentations and discussions will include the perspectives and experiences of policy makers and ministers who have scaled up programs and worked toward implementing early childhood services into a comprehensive national policy.

## ORGANIZATION OF THE WORKSHOP SUMMARY

The workshop summary is organized into eight chapters, starting with this introduction. The second chapter highlights the importance of integrating education, health, and social protection when making investments in young children, and also discusses investments made by the World Bank in an effort to promote healthy child development. Chapter 3 describes the Grand Challenges initiative established by The Bill & Melinda Gates Foundation, and more specifically, Brazil Grand Challenges, to include work on preterm birth, and Saving Brains, as well as partnerships between the Ministry of Health in Brazil, Grand Challenges Canada, and Fundação Maria Cecília Souto Vidigal. Chapter 4 describes the impact and effectiveness of large-scale interventions related to health, sanitation, and child development, along with challenges of implementation and the criteria needed for scaling up. The next chapter addresses opportunities and challenges of maintaining quality at scale and scaling up; processes for monitoring and evaluation, and data information systems; and best practices for building local capacity and addressing culturally and ethnically diverse populations. Chapter 6 focuses on governance perspectives, and addresses public policies for early childhood development and the role of intersectorality in implementing programs and systems on a national level. Chapter 7 highlights themes that were discussed in group breakout sessions related to results-based financing, measurements and indicators, and methodologies for measuring public investments in young children. The final chapter provides a summary of the themes that emerged during the workshop on scaling program investments for young children, and it identifies potential steps for moving forward. Additionally, many of the chapters also include a summary of the discussion session during which panelists answered questions posed by workshop participants.

Programs and policy strategies highlighted in this summary were selected by this workshop's planning committee based on a number of different factors: program effectiveness and available evidence; challenges and barriers programs encountered; approaches to adapting to different cultural contexts and diverse populations; and strength of investment in various levels of government, among others. Information about these programs and policy strategies are detailed in Box 1-2.

## WELCOME AND OPENING REMARKS

Guilherme Gonçalves welcomed members of the forum, panelists, and workshop participants to São Paulo, Brazil. He emphasized the importance of supporting the healthy development of children in diverse

**BOX 1-2**  
**Summary of Programs and Strategies That Focus on**  
**Early Childhood Development and the Integration of**  
**Education, Health, Nutrition, and Social Protection**

Health Center-Based Intervention for Parents

- Implemented in Antigua, Jamaica, and St. Lucia.
- The program's aim is to improve home environments and ensure children have interactive caregivers and opportunities to learn. Parenting activities are integrated into existing health services.
- Training involves 1- to 3-day workshops followed by monthly supervision and coaching.
- Evaluation showed benefits to children's cognition and parents' knowledge of child development.
- Annual cost is \$14 per child, which includes staff time, training, and materials.

Home Visiting Intervention in Colombia

- An adaptation of the Jamaican home-visiting program, which introduced psychosocial stimulation and micronutrient supplements into 1-hour weekly home visits.
- The program's aim is to promote healthy child development and strengthen mother-child interactions.
- Materials were adapted for cultural appropriateness. Home visitors were women within the municipalities, and they underwent a 2- to 3-week training session. Mentors were women with undergraduate degrees, and they received a 6-week training session (Attanasio et al., 2014).
- Evaluation found a significant effect on children's cognition, though less than the Jamaican intervention.
- Annual cost per child is \$515; however, the cost can be reduced through the participation of local mentors (Attanasio et al., 2014; Delpiano and Vega, n.d.).

Sanitation Program in Salvador, Brazil

- Implemented in Salvador, Brazil, in 1997.
- The aim was to improve sewerage coverage and evaluate the effect of the citywide sanitation program on diarrhea morbidity in young children.
- The evaluation found that the prevalence of diarrhea fell by 21 percent.
- The budget for this intervention totaled 440 million U.S. dollars, and funding for half came from the Inter-American Development Bank (Barreto et al., 2007).

Programa Saúde da Família (Family Health Program) in Brazil

- Family Health Program (FHP) has been part of the Unified Health System since 1994, and it was implemented in 82 percent of Brazil's municipalities by 2004.
- The aims of FHP are to emphasize the importance of primary health care and to work toward a comprehensive health system.

*continued*

**BOX 1-2 Continued**

- The evaluation looked at the effect of FHP services on infant mortality between 1996 and 2004 and showed a significant reduction in infant mortality (Aquino et al., 2009; Rasella et al. 2010).

**Bolsa Familia Programme**

- A widespread conditional cash-transfer program that was launched in 2003 and provided cash transfers to poor households.
- Evaluation examined the effects of Bolsa Familia on poverty-related deaths of young children and found that the program led to reduced mortality rates for children under the age of 5; as program coverage increased, mortality rates decreased.
- Large-scale, evidence-based interventions are implemented by political decisions, yet the context and public perceptions of the benefits are crucial to its success.
- Transfer amounts vary by family income and composition, and monthly transfers range from 18 to 75 U.S. dollars per person (Ministério do Desenvolvimento Social e Combate à Fome, n.d.; Rasella et al., 2013).

**Chile Crece Contigo**

- Created in 2006 by a presidential advisory council and implemented in 2007.
- Its aim is to articulate, organize, and integrate early childhood care from pregnancy to age 5. This includes providing public services and monitoring the developmental trajectory of young children.
- Governed by the Ministerial Committee on Early Childhood, which includes the Ministry of Health, Education, and Social Protection (Bedregal and Torres, 2013; Delpiano and Vega, n.d.).

**Primeira Infância Melhor**

- Developed in 2003 and written into law in 2006, it was implemented into 268 municipalities in Rio Grande do Sul, Brazil (Primeira Infância Melhor, 2014).
- The program's aim is to help families understand child development in order to establish strong parent-child bonds through home visiting services.
- Governed by Ministries of Health, Education, and Justice and Social Development Justice and Human Rights, Policies for Women, Culture, Health, Education, and Labor and Social Development.

contexts throughout Latin America and the world so they can reach their full potential.

Following Gonçalves, forum co-chair Ann S. Masten introduced the forum as a collaborative learning community of experts in diverse fields from around the world who are working together to identify and facilitate

#### Early Childhood Commission of Jamaica

- The Early Childhood Commission Act was established in 2003; the comprehensive, cross-sectoral plan for early childhood was designed and implemented between 2008 and 2013.
- The aim was to establish a nationally coordinated program that takes responsibility for the early childhood sector and coordinates activities to ensure a sustainable cross-sectoral approach. This involves program development, monitoring and evaluation, and ensuring public awareness in the health, social, and education sectors for young children.
- Governed by the Ministries of Health, Education, Labor and Social Security, Finance, Child Protection Agency, and the Planning Institute of Jamaica.

#### Mãe Coruja (Mother Owl)

- Established in 2007 by the Consultative Council in the State of Pernambuco, Brazil, and written into state policy in 2009.
- The aim is to provide care for pregnant women and their children up to age 5 years.
- Coordinated by the First Lady of the State of Pernambuco and supervised by the Governor and an executive committee that includes the Department of Health, Advisory Committee, state and regional coordinators, and local offices (de Andrade Lima et al., 2013)

#### Uruguay Crece Contigo

- A National Strategy of Children and Adolescents was developed in 2007 in Uruguay, and the program was launched in 2012.
- The aim of Uruguay Crece Contigo is to meet the needs of highly vulnerable populations, pregnant women, and children below age 4 by creating a comprehensive program that guaranteed the rights of households with pregnant women and children.
- The policy was developed in coordination with the Office of Planning and Budgeting in the Office of the Presidency, and the program was created under the codirection of the Ministers of Health and Social Development, along with the support from all government institutions and ministries that work in early childhood (Presidencia Oficina de Planeamiento y Presupuesto, 2014).

use of the best evidence and practices for investing in young children and child development. She described that the momentum, rationale, and energy behind the forum developed from a growing worldwide recognition that programs and policies need to focus beyond child survival by planning for healthy childhood development. The growing body of

evidence in diverse fields contributes to an understanding of holistic early childhood development, and stakeholders in the field of early childhood development now understand that early childhood experiences are deeply linked to the health and well-being of both individuals and communities in which they live.

Echoing Masten's remarks, Alarcón emphasized the importance of building a learning community, and encouraged opening the conversation to those who help influence public policy, including academics, social society, corporate entities, and multilateral financial systems. She noted that this learning community can contribute to transforming the lives of children and improving the conditions in which they live.

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## 2

## No Small Matter: The Importance of Investing in Young Children Globally<sup>1</sup>

Claudia Costin, in her keynote address, spoke on the importance of integrating the three sectors of education, health, and social protection to promote healthy childhood development. Children should be at the center of policy making, she stated, noting that “investing in young children is one of the smartest investments a country can make.” She stated that the first years of life are crucial to healthy development, and it is important that children receive “regular mental, social, emotional, and physical stimulation along with health care and proper nutrition to keep their development on track.”

Costin argued that too few children benefit from early childhood programs. Policy makers do not always fully recognize the importance of this investment, and parents are not always aware of the benefits of early childhood education. Less than 50 percent of 3- to 6-year-olds are enrolled in preprimary education (Levin and Schwartz, 2012), Costin stated, and only 0.1 percent to 0.2 percent of gross national product in developing countries is spent on it (Engle et al., 2011). Costin also described an effort in Brazil to ensure that every child is enrolled in an early childhood program by 2016. However, full enrollment is not enough. She noted that program quality should be high, as studies indicate that poor-quality programs can be detrimental to development. Further, Costin emphasized the importance of program affordability; in many low-income countries,

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<sup>1</sup> This chapter summarizes information presented by Claudia Costin, Senior Director for Education at the World Bank Group.

private-sector programs do exist, but families cannot afford them. Costin noted that this holds true for other aspects of child development as well. For example, she stated that nearly one in four children under age 5 are physically stunted, and she identified the urgent need for change (United Nations, 2014).

The World Bank Group supports governments in making investments for young children through multiple entry points in the areas of health, social protection, and education. As described by Costin, these practices work together to provide loans, grants, and policy advice in the following areas: food fortification, community nutrition, food security, promotion of breast feeding, prenatal care, immunizations, newborn health, child survival, preprimary education, and school readiness. With regard to school readiness, Costin noted that preschool education is not only about preparation for future education; it also creates happy and healthy children in the present.

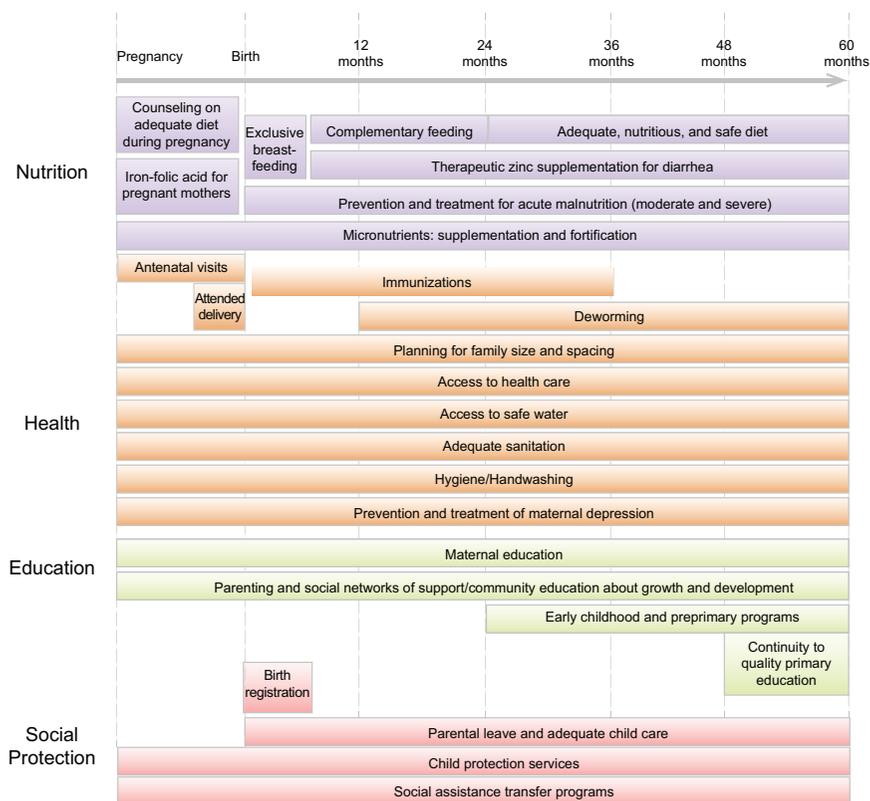
Costin also discussed the World Bank's focus on family support and inclusion. Specifically, she highlighted investments in social assistance and conditional cash transfers (CCTs). As an example, she described Brazil's Bolsa Familia program,<sup>2</sup> which the World Bank supplements with additional money under conditions related to attendance at crèches and preschools, parental participation in teacher meetings, and parental education.

Costin noted that the World Bank Group has invested nearly \$4 billion in multisectoral child-centered projects. In the past 14 years, there has been an upward trend in investment, with a significant increase in 2011. These investments include analytical work that is essential to the work of the World Bank. They assess what is effective and ineffective and can provide evidence for scaling up, as described by Costin. The World Bank also created a guide for policy makers making recommendations for early childhood. It covers nutrition, health, sanitation, social protection, and education (see Figure 2-1). She pointed out that the guide includes interventions focused not only on children, but on maternal health, parental health, and education. Finally, she described an e-learning course the World Bank has developed that provides information to policy makers on why investing in children matters and how to implement early interventions.

Costin expressed concern about the sustainable financing of programs for children, particularly in low-resourced countries, noting that stop-and-go efforts are not beneficial to young children. Making such programs inexpensive and affordable so governments can continue to invest is one approach. However, according to Costin, not all countries should take this

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<sup>2</sup> The Bolsa Familia cash transfer program is discussed in Chapters 4 and 5.



**FIGURE 2-1** World Bank Group Early Childhood Guide for Policy Makers.

NOTE: The idea of presenting interventions by sector and/or age has been used by a number of previous authors.

SOURCE: Denboba et al., 2014.

low-cost approach. Countries that have already made quality investments in young children should continue to do so. Another major challenge is the difficulty in coordinating across government ministries when child development is often managed by different institutions, stated Costin. Even when heads of agencies come to common understanding, bureaucracies do not always come together easily.

Costin closed by underscoring the need for impact evaluation. She explained why institutions such as the World Bank invest in analytical work and impact evaluation versus investing directly into action, and emphasized that knowing what works serves as a guide for future

investment. She shared two examples of evaluations the World Bank has completed in Mozambique and Brazil. The first tested the impact of low-cost preschool programs on children's enrollment in and readiness for primary school. After the program, the children were better prepared for the demands of schooling and more likely to start primary school at age 6. The Minister of Education of Mozambique expanded the model to reach 80,000 children in its third year, and the World Bank is working to evaluate the scale-up (World Bank, 2014). The second evaluation, Costin described, is exploring the impact of full-time daycare participation of Bolsa Familia beneficiaries. Costin emphasized that one important aspect of the program is that there is a priority for children with disabilities. These children are fully mainstreamed and provided with additional support. Moreover, this program is available for children of both working and nonworking parents, positing that there are teenage mothers who need to return to school. The evaluation is ongoing, but she noted that there have been some promising and consistent preliminary results.

## DISCUSSION

In the discussion following the keynote presentation, Costin addressed questions from the audience regarding the loss of positive impact as interventions go to scale. She noted that it is easier to maintain high quality in a pilot, or single setting, but when multiple settings and layers are involved, some loss of quality is expected. However, to ensure that this decline in quality does not decrease all expected outcomes, she asserted that programs at scale should be monitored. Additionally, Costin noted that in order to reduce inequities, resources should reach the most vulnerable children.

Costin also discussed the implementation of programming in areas affected by disaster and conflict. She described Schools of Tomorrow, a program she once worked on that brought preschools into violent areas in Rio de Janeiro. Through her work in this program, Costin and her colleagues determined that the provision of good quality education was not enough in violent areas. Additional resources for schools, including better pay for teachers, were also needed. In this way, programs can address some externalities not related directly to the educational programs to maintain program fidelity.

Finally, she explored the process of converging the different perspectives and goals of the multiplicity of stakeholders of young children, including multiple ministries. In discussing how to integrate the pieces, she mentioned two possible approaches: (1) household visits, in which issues around health, social protection, and education could be addressed, and (2) community centers where parents can come together

to share information and receive support from professionals. Costin also noted that a central coordinating entity high in the government can help to integrate the missions of various government agencies, highlighting Colombia and Brazil as examples.

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## 3

## Grand Challenges for Investing in Young Children Globally<sup>1</sup>

Grand Challenges are a series of initiatives designed to foster innovation in developing solutions to pressing global health problems. Panelists spoke about the focus and intentions of Grand Challenges more broadly, as well as more specific initiatives under the Grand Challenges umbrella in Brazil, involving Grand Challenges Canada and Fundação Maria Cecília Souto Vidigal (FMCSV). The Grand Challenges presented focused on new investments in research and practice with young children.

### OVERVIEW<sup>2</sup>

Gary L. Darmstadt explained that Grand Challenges were developed in 2003, initially as a call for global health solutions, that has since expanded into a diverse family of initiatives. The initiatives are intended to engage people's imaginations around finding solutions for the biggest problems in health and development that require multisectoral collaborative solutions. He remarked that the Grand Challenges were developed in a space that encourages the need to take risks and occasionally use failures as lessons for progress. Currently more than 1,000 grants in 50 countries have been funded.

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<sup>1</sup> For information about Grand Challenges, please visit <http://grandchallenges.org>.

<sup>2</sup> This section summarizes information from Gary L. Darmstadt, The Bill & Melinda Gates Foundation.

At the Gates Foundation, the role of Grand Challenges is based on the following set of principles<sup>3</sup>:

- Strategic and well-articulated grand challenges serve to focus research efforts and to engage the world's best researchers.
- Projects are selected based on public, transparent calls for proposals seeking the best ideas.
- Projects are selected for their scientific excellence as well as for their likelihood to achieve the desired impact; they are milestone driven and actively managed to that end.
- Funders, investigators, and other stakeholders actively collaborate to accelerate progress and ensure advances serving those most in need.
- Projects and investigators make global access commitments to ensure the fruits of their research are available to those most in need.

While the Grand Challenges approach is not suitable for all situations, Darmstadt commented that it could be advantageous under certain circumstances, assuming there is a clear understanding of the scope of the problem. The approach works when there is a need to develop a range of ideas and include new partners and new ways of thinking. In this way, a portfolio of ideas and methods can be built, as well as a platform for convening a community to share their lessons learned. Grand Challenges have shown to be motivating, particularly among young investigators from around the world with new ideas. Darmstadt explained that selection of Grand Challenge awardees is based solely on the quality and feasibility of the idea rather than seniority and experience.

As part of the 10th anniversary of Grand Challenges, Darmstadt stated that a new series of challenges were launched, including a call for putting women and girls at the center of development. This challenge is designed to identify strategies to engage vulnerable women and girls worldwide to improve their health, development, and economic outcomes, and address issues of gender equality.

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<sup>3</sup> Presentation by Gary L. Darmstadt, The Bill & Melinda Gates Foundation, November 11, 2014.

### GRAND CHALLENGES BRAZIL<sup>4</sup>

Claude Pirmez described that in 2010, The Bill & Melinda Gates Foundation partnered with the Ministry of Health in Brazil to advance the national health policy agenda. There were four components: vaccine development and manufacturing; family health research; discovery research done in partnership with the state research foundations, and joint global initiatives. Grand Challenges Brazil, launched in 2012, focused on seeking strategies to prevent and manage preterm labor to reduce the incidence of preterm births.

A total of 156 projects were submitted, with two selected for full grants and 10 for seed grants. They were cofunded by the National Council for Scientific and Technological Development (CNPq) and the Ministry of Health's Department of Science and Technology (DECIT), totaling \$8 million reais. The projects, originating from 12 different institutions in Brazil, addressed issues of preterm birth, from investigating the causes of preterm birth to the development of such solutions as clinical trials for treatment of preterm birth and the management of maternal health. A further set of studies are examining social and environmental factors.

The second Grand Challenges initiative for Brazil, explained Pirmez, is called All Children Thriving, and also includes India and South Africa. This initiative moves beyond reducing preterm birth by expanding the efforts to promote health further into the lifespan. All Children Thriving programs includes three components: diet and nutrition during pregnancy through age 5; maternal, newborn, and child health, including a number of interventions such as immunization, postnatal growth, and management of childhood illness; and social and environmental factors, such as water, sanitation, and violence and child abuse.

### SAVING BRAINS GRAND CHALLENGE<sup>5</sup>

Dominique McMahon explained that Grand Challenges Canada focuses on integrated innovation, specifically social, financial, science, and technological innovation. The aim is to catalyze ideas to have impact at scale. There are four programs, three of which are targeted for global health issues—Saving Lives at Birth, Global Mental Health, and Saving Brains.

McMahon stated that 200 million children, or about one-third of the world's children, are not reaching their full developmental poten-

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<sup>4</sup> This section summarizes information presented by Claude Pirmez, Instituto Oswaldo Cruz.

<sup>5</sup> This section summarizes information presented by Dominique McMahon, Grand Challenges Canada, and Eduardo Marino, Fundação Maria Cecília Souto Vidigal.

tial (Grantham-McGregor et al., 2007). The Saving Brains Challenge is designed to foster the development of “sustainable products, services, implementation models, and delivery models that can . . . protect, promote, and nurture early brain development and child development in the first 1,000 days . . . that can have a lasting impact at scale on the formation of human capital and that can be applicable in low-resource settings.” She asserted that the child is at the center of the Saving Brains Challenge. Moreover, because children in poverty face multiple adversities, solutions should combine approaches that promote health, nutrition, social protection, and nurturing environments.

Thus far, McMahon noted that Grand Challenges Canada has provided 33.7 million Canadian dollars for the Saving Brains Challenge. The first phase of this challenge looked at the persistent impact of interventions that took place in early life, with follow-up from 4 to 18 years later to see the long-term effects of those interventions. The current phase is focused on implementation of new ideas as proofs of concept, with exploration of how to transition to scale. McMahon noted that the success of the Saving Brains challenge rests on a comprehensive partnership at global, regional, and local levels, including both implementation partners and donors. In closing, McMahon remarked that the Saving Brains partnership, first announced in October 2014, includes Grand Challenges Canada, The Bill & Melinda Gates Foundation, Norlien Foundation, Bernard van Leer Foundation, and FMCSV.

Eduardo Marino further discussed the experience of FMCSV with early childhood development programs. FMCSV first began working to support early childhood development in 2008, as described by Marino. One year later, they partnered with the state research agency to create a fund supporting early childhood development with the objective of improving services and public policies from pregnancy to the first 1,000 days of life. With this fund, FMCSV has supported 26 projects. A recent evaluation showed substantial impact for interventions; however, there is still a long path toward affecting public policy.

FMCSV joined with Grand Challenges Canada in 2014, and three projects in Brazil were funded through this partnership, Marino explained. The vision of FMCSV, he remarked, is to create a Brazilian Saving Brains platform to establish stronger policy-friendly proofs of concept, with strong evaluation methodology and scalability.

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## 4

## Evidence of Impact at Scale

This chapter identifies programs designed to facilitate scalability, such as through integration into existing services or efficient use of local resources. Panelists spoke about the impact and effectiveness of large-scale interventions, including characteristics that ensured positive impact. Challenges and issues of implementation were explored, and key criteria for scaling up, such as human capacity, were discussed.

### **REACHING MORE CHILDREN AND FAMILIES WITH EVIDENCE-BASED PARENTING INTERVENTIONS<sup>1</sup>**

Susan Walker spoke about approaches for improving home environments of children up to age 3 by ensuring they have interactive caregivers and opportunities to learn. She described approaches for reaching more children and families through evidence-based interventions. There are two critical needs, according to Walker: (1) effective evidence-based programs for children that are feasible to implement at scale, and (2) skilled trainers and supervisors who can maintain program quality.

To address the first need, Walker and her colleagues designed a pilot that delivered parenting interventions through routine child health clinical visits in three countries in the Caribbean region. This pilot was designed using a minimalistic approach. Walker explained that they did

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<sup>1</sup> This section summarizes information presented by Dr. Susan Walker of the University of the West Indies' Child Development Research Group.

not want to employ extra staff at the clinics or unduly burden parents by increasing the length or frequency of visits. The program implementers produced a series of nine films featuring Jamaican mothers modeling desirable parenting behaviors, such as talking with their babies, offering praise, and reading books. Community health workers showed the films to mothers and caregivers who brought their children in for routine immunizations and checkups, from the ages of 3 to 18 months. These workers were trained not only to show the videos but also to demonstrate the activities and give mothers a chance to practice while at the clinic. The mothers were also given message cards and play materials to take home.

Walker noted that the pilot demonstrated benefits to children's cognition and parental knowledge of child development, with effect sizes comparable to some home visit programs, though it was not as effective as the more intensive weekly home visitation program. There were no adverse effects of adding early childhood development activities to existing measures for improving child nutrition and health. However, Walker did point out a few challenges, such as the limited number of visits (five contacts between ages 3 and 18 months). Compared to weekly home visits, these contacts were too few, and the majority of them occurred prior to age 12 months. Walker observed that this program could be integrated into a more comprehensive strategy that would also include programs for children ages 1 to 3 years. An additional challenge she highlighted was difficulty with infrastructure and resources. Many of the clinics were crowded and noisy, and nurses had limited time. Walker asserted that going forward, such a program would need to be properly provisioned so as not to have a negative impact on the existing functions of staff.

One factor contributing to the success of such a program, according to Walker, is the high coverage of, and compliance with, child health visits in much of Latin America and the Caribbean. She cautioned that adapting this program in areas with less coverage might not result in the same success. Finally, Walker observed that the Inter-American Development Bank estimated the annual cost of the intervention at 14 U.S. dollars per child.

Walker also described the work done to expand access to the Jamaica Home Visit Intervention and its Web-based training and support package. The home visit program has a strong evidence base, is feasible in low-resource settings, and has been successfully replicated in a number of countries. Its goal is the delivery of positive parenting skills to develop more responsive, interactive caregivers. To further scale up the program, Walker and her colleagues, in partnership with Grand Challenges Canada, developed a Web package to increase the capacity of staff to implement the program.

The program included a series of films developed in Bangladesh, Jamaica, and Peru, including three 15-minute films that walk through the

steps of a home visit, and 28 shorter films that depict specific concepts and activities. Additional elements will include updating the curriculum and developing training manuals and a guide for adapting the program to specific country needs or context. The training package will be rolled out in four countries to “early users” to identify challenges and areas for modification and for preliminary evaluation. Walker noted that the next step would be to put the training materials online and develop technical support, with further iterations of modification and evaluation as organizations take up the training. All of the materials will be available via a Creative Commons license with the hope that users will share their own adaptations and experiences.

### **DESIGNING, IMPLEMENTING, AND EVALUATING A SCALABLE HOME VISITING INTERVENTION: IMPACTS AND CHALLENGES<sup>2</sup>**

Marta Rubio-Codina spoke about the evaluation she and her colleagues developed to bring the Jamaican home visiting model to medium scale in Colombia. This evaluation will help determine the intervention’s effectiveness in Colombia and provide some evidence to the government about whether the program can be implemented at a larger scale. The intervention took place over 18 months, Rubio-Codina noted, and included two components: psychosocial stimulation, delivered in 1-hour weekly home visits; and micronutrient supplementation (Attanasio et al., 2014). She explained that home visitation is about changing behaviors and practices regarding parenting in the homes and its impacts have been demonstrated in improving child learning and mental well-being, among other effects (Grantham-McGregor et al., 1991). Rubio-Codina explained that the intervention was delivered within the sampling frame of an existing conditional cash transfer (CCT) program, *Familias en Acción*, which targets the poorest 20 percent of families in Colombia. The program was rolled out with a randomized controlled trial design, with four groups in multiple areas—those who received the psychosocial stimulation, those who received micronutrient supplementation, those who received both, and a control group that received neither.

As with most CCT programs in Latin America, groups of beneficiaries select a representative to serve as a “mother leader” who speaks for them to the program authorities. Rubio-Codina remarked that “mother leaders” displayed characteristics suitable for home visitors, and these

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<sup>2</sup> This section summarizes information presented by Marta Rubio-Codina, Centre for the Evaluation of Development Policies at the Institute for Fiscal Studies and the Inter-American Development Bank.

women were trained and supported by mentors from Bogotá to deliver the program. She also noted that this supported the intention to embed the program within the local community to maximize community ownership and engender fundamental cultural change.

The evaluation showed a reduced effect size compared to the Jamaican home visiting intervention, which Rubio-Codina explained is an example of how scaling up can reduce impact. However, she commented that the effect was still significant and sizeable. The size of the estimated effect is equivalent to closing a third of the cognitive gap between low- and middle-income families in Bogotá reported in Rubio-Codina et al. (2015). Importantly, she stated that parenting practices were improved as measured by the level of play materials and play activities in the homes. The estimated cost of the program was 515 U.S. dollars per child per year, which Rubio-Codina remarked could be reduced by identifying mentors from local communities to provide supervision.

Rubio-Codina described a few challenges she and her colleagues encountered:

- Design—including adapting the intervention to deliver to scale, through the participation of local women with limited education (and adapting training materials accordingly), and incorporating the local context, all while maintaining quality and program fidelity
- Implementation—including selection of home visitors, motivation of home visitors, adequate training and mentorship, use of technology, sustained engagement of all program personnel as well as beneficiaries, and provision of salaries and career development
- Evaluation—including ensuring a representative sample, maintaining enrollment, reaching children at the appropriate age, evaluating both process and outcomes to assess quality of interaction and feasibility of implementation, and providing adequate funding for both the program and the evaluation

### **EVALUATING LARGE-SCALE INTERVENTIONS ON CHILD HEALTH IN BRAZIL: THE ROLE OF CONTEXT AND CHALLENGES<sup>3</sup>**

Mauricio L. Barreto shared three examples of large-scale child health interventions and evaluations related to sanitation and family and child health in Brazil. The first was an expansion of sanitation in the city of

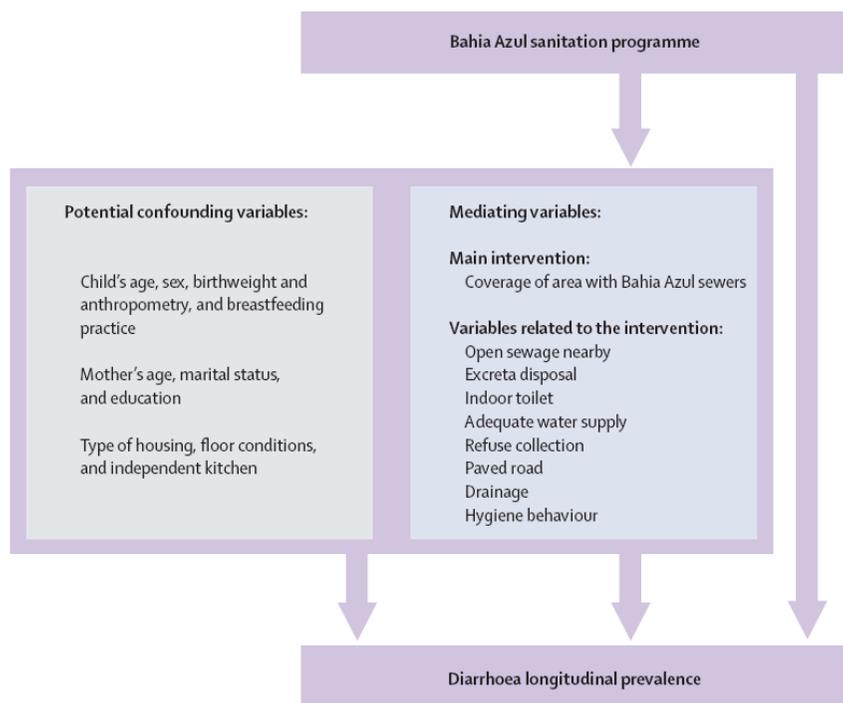
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<sup>3</sup> This section summarizes information presented by Mauricio L. Barreto, the Collective Health Institute, Federal University of Bahia.

Salvador in order to reduce childhood diarrhea. In 1995, 25 percent of households were connected to sewer lines, and this intervention increased coverage to 80 percent of households (Barreto et al., 2007). Barreto noted that while it is commonly understood that improved sanitation leads to improved health, there are very few evaluations to show the connections. He and his colleagues designed an evaluation of the intervention, which examined several variables related to the outcome measured—diarrheal prevalence in children (see Figure 4-1).

The evaluation showed a 20 percent reduction in diarrhea prevalence, as well as a 50 percent reduction in other intestinal infections. In a related study using an econometric evaluation, the intervention proved not only to be cost-effective, but also that there was high approval in the population for the improved sewage system (Santos et al., 2011).

Programa Saúde da Família, the Family Health Program in Brazil, is another large-scale program that is based on the principle from the World Health Organization's Alma-Ata meeting that emphasized the importance



**FIGURE 4-1** Conceptual model of a sanitation program evaluation.

SOURCE: Barreto et al., 2007.

of primary health care, according to Barreto. This program quickly grew throughout Brazil, and now covers approximately 66.5 percent of the population. In an evaluation of the impact of the program on child mortality, morbidity, and other outcomes, Barreto and his colleagues found that infant mortality has indeed been reduced (Aquino et al., 2009). This reduction was greater in areas that had higher levels of poverty prior to entry into the programs, suggesting also that the program might help to reduce health inequities.

Finally, Barreto shared an evaluation of Bolsa Familia,<sup>4</sup> the world's largest CCT program in Brazil (Rasella et al., 2013), which is linked to the health system. He and his colleagues assessed the impact of various tiers of Bolsa Familia, controlling for social and economic factors. Bolsa Familia was associated with decreased infant mortality, as well as hospitalization. This effect increased with greater coverage. Barreto also speculated that the Bolsa Familia and Programa Saúde da Família operated synergistically, with the former affecting the social determinants of health, and the latter more directly impacting health.

Barreto closed with the following observations:

- Large-scale interventions are usually implemented by political decision.
- Well-informed and science-based interventions have a great chance of success.
- Well-designed and well-conducted evaluations are an important resource to measure and tease out the effects of different interventions.
- Child health outcomes have multiple causes. It is necessary to develop a clear framework of design and analysis.
- While cost-effectiveness of programs is important, it is also crucial that the public perceives the value and benefits of the programs.
- A key part of evaluation is to understand the context of the intervention, which includes having national information systems that collect and ensure the quality of data on processes and outcomes.

## DISCUSSION

Raquel Bernal of the Universidad de los Andes reflected on the preceding presentations and shared her insights:

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<sup>4</sup> For more information about Bolsa Familia, visit <http://www.mds.gov.br/bolsafamilia> (accessed June 23, 2015).

- Effects of large- or medium-scale programs could be lower than those seen in efficacy trials, but still large enough to make investments worthwhile.
- Scaling could be a key factor in achieving impact; sometimes community-based variables have a greater effect than individual-level factors.
- “Minimalist” program designs can be scalable and effective, especially if integrated within existing services.
- Parenting program services can multiply effects of educational interventions, because home-based behaviors are changing and enhancing early education as well.
- Challenges in scaling up interventions are related to fidelity and quality, which require measuring, evaluating, monitoring, and assessing.
- Scalability might be advanced by using existing community services, particularly the training of embedded program facilitators.

One workshop participant raised the question about how programs address demand within the community, and how community members receive the specific programs proposed. Walker noted that health workers seem accepting of programs, and Rubio-Codina indicated that beneficiaries often describe a greater understanding of the cognitive and emotional needs of their children, as well as expectations for a better future for them. Barreto further noted that while many large programs are implemented because of political decisions, sometimes they transcend political decisions because the demand is large within the population. And the success of some programs can build additional demand within the population for other programs to improve quality of life.

Panelists further examined issues and opportunities in program design. In response to a question about the micronutrient component of the home visitation programs, Rubio-Codina noted that micronutrient supplementation showed little to no effect, and speculated that further exploration of the design and use of micronutrients would be necessary. She noted, for example, that iron deficiency is not the largest cause of anemia among young children in Colombia, so supplementing with iron would not have a substantial effect. In response to a question about the use of discipline, Walker explained that the home visitation program in Jamaica did not specifically address discipline, but rather showed the importance of praise in reinforcing good behavior.

Human resources and training certification issues were also raised, and panelists noted that there is enormous variability in the skills and competencies of community health workers. Walker further explained that in some countries community health workers are not paid, though

they are in Jamaica, and their basic competencies have increased. She also cautioned that the training materials are intended for literate women, though not necessarily with a great deal of education. For supervisors, however, she pointed out that they tend to have experience with research projects, and their skills are critical for scaling up because they play an important role in maintaining program quality. Rubio-Codina cautioned that, in scaling up, consideration should be given to how to expand training without introducing too many layers between supervisors, mentors, and home visitors, so as to avoid information loss. She also remarked that certification schemes could assist in maintaining motivation to improve skills and sustaining engagement and quality standards in the delivery.

Finally, workshop panelists discussed the potential for community empowerment, particularly among women, and its impact on health. Barreto noted that some studies of Bolsa Familia indicated increasing feelings of empowerment and behavior change among women, as well as a shift in local business as disposable income increased. Women trained as community health workers or home visitors can also model healthy behaviors for other family members as well as in their communities, so that health is valued and a demand for healthy programs is created.

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## 5

# Maintaining Quality at Scale

This session was framed around five questions posed by the moderator, Florencia Lopez Boo from the Inter-American Development Bank (IDB):

- What challenges were present in the scaling up of programs, and what lessons were learned to overcome these challenges?
- What processes to set and monitor quality standards during implementation were successful in maintaining quality at scale?
- What has been your experience in using data information systems for monitoring and evaluation, and what successful feedback loops or continuous quality improvement systems have been used?
- How have issues in centralization and local capacity been addressed, in both the short and long term? How are gaps between local needs and infrastructure and resources being addressed?
- What are some best practices in approaching culturally and ethnically diverse populations, and adapting programs to meet their needs?

Panelists responded to these questions from their own perspectives in designing and implementing national and state-level policies and programs.

## DEVELOPING A NATIONAL CHILD POLICY IN BRAZIL<sup>1</sup>

Paolo Bonilha of the Ministry of Health of Brazil explained that Brazil has been advancing on a number of social indicators, particularly Millennium Development Goal four on infant and child mortality. Brazil had a significant reduction in infant mortality, as a result of public policies adopted by the national system of health. This includes universal health care, with a focus on primary care and family health, a comprehensive immunization program, and the prioritization of breastfeeding. Additionally, he discussed the effectiveness of the Bolsa Familia conditional cash transfer (CCT) program and its impact on infant mortality. Bonilha remarked that this program provides families and children with better prenatal and vaccination coverage, and has also been shown to decrease infant mortality, particularly in the most vulnerable families.

The improvement in child survival in Brazil, Bonilha noted, has created momentum for the development of a national policy for children's health to build a foundation for healthy development throughout the lifespan. Bonilha explained that the government of Brazil created a national program called Brazil Carinhoso, which was inspired by Chile *Crece Contigo, de Cero a Siempre*<sup>2</sup> in Colombia, and *Educo a tu Hijo*<sup>3</sup> in Cuba. This program guaranteed that Bolsa Familia would offer CCTs with attention on early childhood. The program is also expanding quality daycare centers, micronutrient supplementation, and school-based health care. It also includes a special focus on vulnerable families, including those with children with disabilities or chronic disease, or mothers with mental illness or substance use disorders. Bonilha cautioned, however, that to expand this program, community health agents would require additional training to be properly qualified to work with pregnant women and young children. He explained that some pilots have been initiated to assess the possible strategies that could be integrated into the national policy, home visitation in particular.

An additional project that is being developed, Bonilha explained, is focused on reducing malnutrition inequities in indigenous populations in the Amazon region and in the countryside of São Paulo. Malnutrition and mortality rates are high among these populations, and comprehensive

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<sup>1</sup> This section summarizes information from Paulo Bonilha, National Coordinator, Children's Health and Breastfeeding, Ministry of Health, Brazil.

<sup>2</sup> *De Cero a Siempre* is the National Strategy for Comprehensive Early Childhood Care implemented in Colombia by the Presidency of the Republic (<http://www.deceroasiempre.gov.co/QuienesSomos/Paginas/QuienesSomos.aspx>) (accessed June 23, 2015). Constanza Alarcón discusses components of this strategy in Chapter 6.

<sup>3</sup> *Educo a tu Hijo* is a research-based and intersectoral early childhood development program for children birth through age 6 and their families (Organizacion de Estados Iberoamericanos, n.d.). Components of this program were not discussed at the workshop.

programs are being developed in these regions to educate health agents to visit homes and work with mothers on issues of malnutrition, breastfeeding, and healthy food provisions. These health agents will also focus on fostering the link between mother and child and encourage healthy early childhood development.

### CHILE CRECE CONTIGO<sup>4</sup>

Andrea Torres noted that Chile Crece Contigo is a system, not a program, which requires complex coordination of multiple strategies. This system was initiated in 2007 with strong support from President Bachelet to work in half of the municipalities in Chile, and in 2008, it was implemented throughout the entire country. In discussing how to scale up the system across all of Chile, Torres emphasized the importance of multisectoral collaboration, with investment not only at the ministry level but also the local level, and drawing upon existing local and international successes and experiences, including Chile Solidario and Bolsa Familia in Brazil. Torres also highlighted the goal not of creating new structures within the government but rather taking advantage of what already existed, starting with the public health system, because 80 to 90 percent of children between 0 and 4 years of age receive care under that system.

One lesson they learned from this process was the need to incorporate and maintain strong support in local governments, because while policy can be outlined at the national level, the point of contact between families and public policies is at the local level. This support involves financial resources, technical assistance, materials, training, and more, in addition to an assessment model. Torres noted that additional work was still needed to develop quality standards for all of Chile Crece Contigo's services within the various participating sectors (education, health care, and social protection). While there are quality standards in health, more work is needed in creating quality standards for education and community networks.

Some quality process indicators and standards have been developed to monitor the services of Chile Crece Contigo, such as thorough uniform protocols that can highlight gaps in the service or in reliability of implementation. Some of these indicators relate to the development of a work plan at the local level, performance of health staff, registration and referral, follow-up monitoring, and delivery of educational materials. In terms of community indicators, Torres noted that Chile is more family oriented, and there are still lessons to learn to build community impact.

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<sup>4</sup> This section summarizes information presented by Andrea Torres, Director, Chile Crece Contigo.

Some additional indicators she identified include children's well-being, parental skills, and reduction in the rates of developmental lags or delays.

To monitor, assess, and follow up on the developmental trajectory of children, Torres noted that Chile Crece Contigo designed and implemented an online registration, referral, and monitoring system, which is linked to the national public health system. Each individual child has a unique identifier that is used to monitor and track development. The data system also focuses on risk factors, including teen pregnancy, maternal depression, lack of family support, racial violence, and others, and creates alerts for areas of vulnerability in order to refer a child as needed. She explained that data are collected and analyzed, and the assessments are used to inform public policy decision making. Torres noted some challenges with using this system, including limited or no Internet connection in certain areas and the fact that, in some local teams, there are still gaps in the management and use of information.

### PRIMEIRA INFÂNCIA MELHOR<sup>5</sup>

Primeira Infância Melhor, as explained by Liése Gomes Serpa, is the early childhood policy implemented in the state of Rio Grande do Sul, Brazil, and is funded and coordinated by the Secretariat of Health alongside the Secretariats of Justice and Human Rights, Policies for Women, Culture, Health, Education, and Labor and Social Development. Gomes Serpa explained that the main objective of Primeira Infância Melhor is to make families feel comfortable and at ease with their children's development in order to establish strong parent-child bonds. This is done through a weekly home visitation program in which visitors encourage parents to incorporate daily play with their children. The home visitor, local to the community, also links the family into an intersectoral care network.

Gomes Serpa noted that Primeira Infância Melhor is implemented in 268 of the total of 497 municipalities in Rio Grande do Sul. At the municipal level, she described, there is a policy management group that oversees challenges and coordinates across sectors. This group also holds training sessions that help the state identify differences in populations across regions in order to better recognize and address issues for specific groups and contexts. Targets are established on a local level, and indicators are measured based on data collected during home visits.

To maintain quality at scale, Gomes Serpa mentioned periodic trainings—quarterly, semi-annual, and yearly—where experiences are exchanged and lessons are shared. There is also a database to hold infor-

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<sup>5</sup> This section summarizes information presented by Liése Gomes Serpa, Director, Primeira Infância Melhor.

mation such as descriptions of communities and families, and helps monitor children's milestones. Using this system, the home visitors can identify and address gaps to focus on, such as language, cognition, motor skills, socio-affective skills or family relationships. She noted that sometimes it is a challenge to convey the importance of collecting such data, but such monitoring is crucial as reports are issued for municipalities to adjust and qualify their performance.

In closing, Gomes Serpa emphasized that the initiative focuses on vulnerable populations such as the African-Brazilian and indigenous communities, as well as women's prisons, in order to promote the bond between mothers and their children. Women deprived of their freedom, she explained, keep their children with them up to 1 year of age, after which they are cared for through local intersectoral care networks. *Primeira Infância Melhor* supports bonding between mother and child in that first year, and continues to follow up after the child leaves the prison facility. Furthermore, she stated that home visitors come from Afro-Brazilian and indigenous communities, so they are able to maintain and foster traditions and culture while promoting the bond between mother and child.

## DISCUSSION

In the discussion following the presentations, panelists further explored issues and challenges specific to children with special needs and maintaining engagement of staff.

Bonilha explained that there is some confusion in the scientific literature as to the impact of home visitors, particularly because these visitors are not always health professionals, and are not always paid. He pointed out that some research indicates that for high-risk or vulnerable children, such as those with mental illness or developmental difficulties, home visits are not as effective. In Brazil, home visitors are professional health agents, and they have the support of higher-level professionals such as physicians, nurses, and teachers. Torres remarked that the Chile *Crece Contigo* program identifies the most vulnerable children with disabilities and refers them to special institutions for care. However, there are also efforts to provide special equipment for teachers and caregivers to support the inclusion of children with disabilities in kindergarten classroom settings as well as to support at-home care. Gomes Serpa emphasized that the home visitors with *Primeira Infância Melhor* work within a network of care. She acknowledged the difficulty of working alone with families, especially families with children with disabilities and special needs, and that it is important to work with a network of professionals in different fields to achieve a system of support.

In response to a question raised by workshop participant Martin Benavides Abanto regarding efforts to build local capacity in municipalities, Bonilha emphasized the importance of increasing funding to train staff in health care and the home visitation programs, and once the programs expand nationwide, an incentive program can be implemented. Currently, however, funds and resources are limited. Torres observed that Chile Crece Contigo continuously trains staff and encourages the technical assistance of local and national groups. It is crucial to acknowledge the successes, she argued, and it should be recognized that this is important work. She noted, however, that further effort should be made to improve the context in which health agents and home visitors work, in terms of resources, salary, and other areas. Similarly, Gomes Serpa stated that ongoing education is important, as is recognition of, and appreciation for, the work that staff is doing, in addition to providing an appropriate supply of materials and other resources.

Finally, panelists discussed assessment and replicability of programs. First, Bonilha remarked on the assessment of competencies at the family and community levels. Health agents track indicators related to family activities, such as play, reading, nutrition pre- and post-intervention. However, an evaluation of community competencies needs to be explored, and Bonilha stated that health agents can assist with this process. Further, additional questions in such an evaluation could address the involvement of the community on cultural norms to promote healthy childhood. Then, Torres emphasized that an assessment of Chile Crece Contigo's model would be most useful for other countries, as this model follows the trajectory of development through health, education, and social protection. She explained that the program is coordinated within a small intersectoral ministry focused on social development, because the issue is not under the purview of any one discipline, rather it requires a cross-sectoral approach. Gomes Serpa agreed, noting that early childhood programs cannot take place in an isolated way and emphasized the need and value of an intersectoral network of care.

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## 6

## Perspectives on Governance

Panelists speaking during the Perspectives on Governance session addressed the institutional architecture that is essential for governments to manage national policies on young children. Constanza Alarcón noted that previous panels had discussed various aspects of programs needed for implementation and scaling up, including quality, integrality, and the intersectorality, and queried the panelists about how they have organized their work to manage the different frameworks of the public policies related to early childhood development. She asked the panelists to address the following questions:

- What are the public policies for early childhood development that have been implemented in each country, and what are the entities responsible for managing and leading these policies?
- What institutional arrangements are necessary for implementing plans and programs for early childhood development?
- What is the role of intersectoral activities, and how do they interact to create early childhood development policies?
- Are there any additional mechanisms to support early childhood development policies?

Panelists described their experiences implementing early childhood development policies and programs through strong leadership and governance structures in their respective programs.

## STRUCTURING NATIONAL EARLY CHILDHOOD PROGRAMMING IN JAMAICA<sup>1</sup>

Maureen Samms-Vaughan spoke about the experience of moving from multiple agencies undertaking child-focused programs to national coordinated programming, the process of which has evolved over the years in Jamaica. She described three stages that the country went through to reach the current state:

- Obtaining comprehensive information on the status of children and programs for early childhood. This happened in Jamaica in the late 1990s.
- Establishing a cross-sectoral state institution to take responsibility for the early childhood sector. The Early Childhood Commission Act in 2003 created such a government entity.
- Developing and implementing a comprehensive cross-sectoral national strategic plan for early childhood. Samms-Vaughan explained that this first occurred from 2008 to 2013 and is currently in its second phase (2013–2018).

Samms-Vaughan expounded on these stages. Information gathering, she remarked, requires not only information on current status in all sectors—health, social sector, and education—but also understanding past practices. “In short,” she stated, “it was important for us to understand where we were and how we got there.” She gave the example of high preschool enrollment in Jamaica; 95 percent of children are in school by age 3 years. This was not due to government policy, but rather part of the history and culture of Jamaica. It was important to know this, she argued, because it teases out the difference between community demand and government intervention, and affects the process of change. Additionally, the information-gathering process also discovered gaps in childhood care: (1) less than one-third of parents received parent support, particularly those with children with disabilities; (2) though enrollment in preschool was high, there were issues with quality and inequity; (3) research showed that existing early childhood activities were poorly coordinated; and (4) there was a need for a single coordinating body.

In response, the Early Childhood Commission’s (ECC’s) role was established to take responsibility for the early childhood sector and coordinate activities within a legal framework that ensured a sustainable, cross-sectoral approach. The ECC’s responsibilities include guiding pol-

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<sup>1</sup> This section summarizes information presented by Maureen Samms-Vaughan, Early Childhood Commission of Jamaica.

icy and program development, monitoring implementation, regulating schools, consulting stakeholders, coordinating activities, seeking additional funding, conducting research, and ensuring public awareness.

The ECC led the development of the strategic plan, using all available research, internationally and locally, as well as public consultations, which ensured community input into the plan. The strategy included five objectives, the first of which involved parenting. This led to the creation of a national parenting policy with standards and support. The second and third objectives focused on children up to age 3 years, and included improving the quality of child care at clinics, early identification of children with disabilities, and improvement of psychosocial stimulation. The fourth and fifth objectives addressed children aged 3 to 6 years and focused on regulating preschools, including training of staff and developing a child-centered curriculum. Underpinning these five objectives was a cooperative framework with clear responsibilities and targets for partners, and a data-monitoring, collection, and evaluation process.

Samms-Vaughan noted that the ECC is governed by a board representing the Ministries of Health, Education, Labor and Social Security, Finance, the Child Protection Agency, and the Planning Institute of Jamaica, as well as a number of independent and private-sector partners. This ensures the cross-sectoral nature of the commission, which is further bolstered by the position of the Director of Cross-Sectoral Coordination. Moreover, while the strategic plan is also cross-sectoral, the objectives are met within each of the ministries, who sign memoranda of understanding with the ECC and include the plans in their budgets every year. Samms-Vaughan closed by acknowledging that developing this structure was challenging and might not work for every country, but it has resulted in some successes nonetheless.

## MOTHER OWL: PUBLIC POLICY IN PERNAMBUCO<sup>2</sup>

Ana Elisabeth de Andrade Lima spoke about the challenges and successes of Mãe Coruja, or Mother Owl, a program that creates a network of care to reduce maternal and infant mortality. The program is implemented in the state of Pernambuco, which Lima explained is situated in the northeast of Brazil and has a population of more than 8 million. Pernambuco experiences high levels of inequality between urban and rural areas of the state, as found in a 2007 study conducted by the administration. This study also identified the need for a program that promotes the health and well-being of the new generation of young children.

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<sup>2</sup> This section summarizes information presented by Ana Elisabeth de Andrade Lima, Government of Pernambuco in the Secretary of Health, Brazil.

Mãe Coruja has been part of the state policy since 2009, and has been implemented in 105 municipalities. The name carries significance, Lima remarked, because the owl is the only bird that can see 360 degrees, which corresponds to the philosophy of the program. She emphasized the importance of having knowledge of partners and stakeholders who work together to see the picture as a whole.

Lima noted that Mãe Coruja is monitored at the central state level every month, with regional committees to monitor and evaluate, and implementation at the local level. With the help of nine participating state secretariats, the program supports women's empowerment to increase literacy and reduce truancy, facilitates registration at maternity wards to ensure prenatal follow up, provides support for women farmers, supports income-generation activities, and provides psychosocial assistance. Additionally, data collected on registered women and children is accessible online to facilitate real-time intervention.

Lima emphasized the importance of coordination and monitoring, as well as ensuring buy-in at all levels for effective governance. There is strong political will, but engagement by all partners can help sustain the program in the event of a change in administration. Lima also stated that the government has made strong investments in human capital and resources, including technology.

After 8 years of program implementation, Lima noted that while Brazil has seen an overall reduction in infant mortality, Pernambuco saw the greatest rate of reduction, particularly in those municipalities where Mãe Coruja was present. She remarked that the government is now working on an early childhood development program based on the Chilean model, and with this, Pernambuco is building a new history and a new life for every child.

### URUGUAY CRECE CONTIGO<sup>3</sup>

Cristina Lustemberg, coordinator for Uruguay Crece Contigo, explained that 8 percent of the population of Uruguay is below the age of 5 years. In 2005, 64 percent of children were below the poverty line; today, this number has significantly improved, with Uruguay producing the greatest drop in poverty in Latin America in that time period. However, despite strong reforms, there is still a concentration of poverty in families headed by women or with young children.

Lustemberg further explained that progress has been made with the development of programs and policies focused on women and children.

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<sup>3</sup> This section summarizes information presented by Cristina Lustemberg, Uruguay Crece Contigo.

For example, structural reforms in the health system—in benefits, norms, and services—led to a more holistic approach to the health of women, while there have also been considerable efforts on building up the child immunization program. In 2008, a National Strategy of Children and Adolescents was developed. These actions have led to Uruguay becoming a leader in the region in social development. Additionally, she remarked, an intersectoral framework was created to guide the planning of policies for children and adolescents through 2030, in health, education, and other social sectors. This was coupled with a strong fiscal effort on the part of the government to fund those priorities that improved children's health and development, and led to an increase from 4 percent to 5.8 percent of the national budget on social expenditures.

In 2012, research was conducted that highlighted gaps in early childhood and early adolescence. This led to a development of a policy based on the Chilean model, *Crece Contigo*, to be implemented to meet the needs of highly vulnerable populations, pregnant women, and children below age 4. This policy was developed in coordination with the Office of Planning and Budgeting in the Office of the Presidency. Lustemberg explained that all of the stakeholders recognized this was not an area to be addressed within any one sector but rather an undertaking that would cut across sectors to institutionalize strong management of policies of early childhood.

Lustemberg stated that a program was created under the codirection of the ministers of health and social development, with suitable technical space and strong leadership and support from all of the government institutions and ministries that address early childhood, such as health, education, housing, labor, and others. Additionally, she remarked that there are strong governance structures in place, including involvement at the local level, to carry out a national policy successfully.

The goal was to create a comprehensive program that guaranteed the rights of households with pregnant women and children less than 4 years old, Lustemberg said. However, they faced several challenges in accomplishing this goal. First, there was fragmentation in the policies that affect early childhood across sectors. In particular, without coordination, there was a failure to see the full scope of what families needed. Second, there was a lack of coverage, particularly for children between birth to age 3. A law passed in 2008 required children at 4 to attend school; however, there were not enough preschools for younger children. Additionally, the health system was unable to produce long-term results for improving child development. And finally, policies were not reaching the extremely vulnerable populations, such as those stuck in generations of poverty, who often had low literacy and high rates of adolescent pregnancy. Lustemberg observed that a different approach was needed for these populations, and a new

program was created that focused on social and educational empowerment, skill-building, strengthening institutional capacities, and following up with vulnerable populations. Lustemberg explained that there was a particular focus on vulnerable populations, because they have discovered that identifying and following up with households of extreme poverty changed all of the vulnerability indicators they had measured.

She closed by referencing a need for integrating a gender approach into early childhood work, but argued that policies needed to be integrated, with common goals and objectives, and strong leadership.

### **COORDINATING EARLY CHILDHOOD MANAGEMENT IN COLOMBIA<sup>4</sup>**

Constanza Alarcón shared lessons learned from the Colombian experience of expanding and scaling up programs for early childhood. Colombia has a high rate of poverty in childhood, and the government is directing the coordinated management of different sectors to create programs that guarantee rights, rather than focus on risk or vulnerability. The programs should also include women's health prior to conception and during pregnancy, as well as the integral development of children after infancy. Alarcón remarked that programs should also be intersectoral in nature. She cautioned, however, that there are multiple ways to practice intersectorality. It could be focused on coordination, in which sectors work together with their own responsibilities but with the knowledge of what others are doing. Another approach could involve focusing on competencies of various sectors to identify where they intersect in order to complement the service. Intersectoral management in this case would focus on those intersections; she noted that each sector has its own agenda and identifies where to converge their goals. In Colombia, she explained, an Intersectoral Committee was established in the Presidency of the Republic, which convenes all of the sectors and delegates responsibilities by competency.

### **DISCUSSION**

In a discussion following the presentations, panelists addressed the inclusion of fathers and other caregivers in their work. De Andrade Lima explained that Mãe Coruja intends to reach the whole family. She remarked that the inclusion of fathers happened naturally, and they are active participants in promoting the health and well-being of their chil-

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<sup>4</sup> This section summarizes information presented by Constanza Alarcón, Presidency of the Republic, Colombia.

dren. Samms-Vaughan described Parents' Places, the operational aspect of the National Parenting Policy. There are three levels of Parents' Places: (1) places where parents can receive written information, primarily in rural areas; (2) parenting classes through which parents are provided with support from a trained parent facilitator; and (3) referral services provided to parents, and these high-level services would often be located where other services exist, such as hospitals. She noted that the parenting policies address the importance of fathers, which is important in Jamaica where many children live in households without a father figure. In the case of Uruguay *Crece Contigo*, Lustemberg acknowledged the inclusion of fathers, uncles, and grandfathers in communication materials. She argued that the country must undergo cultural changes in order to bring the male figure into practices and policies, and to further the discussion about the relationship between father and child.

One participant asked the panelists to address best practices for maintaining quality during the implementation of programs in the field. De Andrade Lima explained that from the beginning, Mãe Coruja has aligned competencies and knowledge across all their professional sectors. The program includes modular education, as well as continuing education for all staff, and there are routine meetings among partners at local, regional, and central levels. Lustemberg noted that staff in their field programs are highly trained and specialized. She also observed that they receive psychological training as well, so they can adequately respond to some of the difficulties their beneficiaries might be experiencing. Samms-Vaughan spoke about training and capacity for parent facilitators. All field staff in the ECC are trained as parent facilitators, and they certify and provide support to early childhood parent places.

While there is still a focus on reducing infant mortality, panelists indicated that there has been significant progress in other areas as well. They pointed out that some of the focus has shifted to improving the quality of life for children, including cognitive development and family dynamics. Panelists also shared thoughts on ensuring that programs are responsive to emerging needs, which are identified through strong monitoring and evaluation methods. In particular, as top-level goals are met, issues of inequity become evident, as well as the need to address them. The three panelists felt that while policies and programs need to maintain alignment and fidelity, diversity of culture and context can mitigate the impact of programs if not more specifically tailored.



## 7

## Components of Scaling and Sustainability

In the afternoon of the workshop, participants broke into smaller groups for concurrent sessions to further discuss themes raised in the panel presentations. These themes included results-based financing, measurements and indicators, and methodologies for measuring public investments in young children.

### RESULTS-BASED FINANCING<sup>1</sup>

Martin Benavides Abanto shared participants' remarks from the breakout session on results-based financing. He noted that there has been a change in the past few years in terms of how public resources are managed, which has provided a number of benefits and challenges. One benefit mentioned was the targeting of resources toward people's interests, which has resulted in addressing specific social concerns, such as issues related to nutrition, education, and violence, but also has served as a mechanism to empower people. For example, participatory research enables communities to take part in the generation of information, which gives them better knowledge of issues and more effective routes of action.

However, a number of challenges were raised as well, and Abanto noted two. Results-based financing is a very intensive approach, he observed, and not all countries have robust information systems that are

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<sup>1</sup> This section summarizes information presented by Martin Benavides Abanto, Group for the Analysis of Development (GRADE).

able to generate enough data analysis to inform budgets. Abanto raised the question of how information systems might be improved. At the same time, he mentioned that some group participants questioned how successfully this methodology could be taken up when some programs are still ideologically or politically driven.

A second issue Abanto reported was the concern around producing results. He remarked that when talking about childhood, most of the outcomes are not in the short term, but medium to long term, so impact assessments can have a time lag. One way he suggested working through this is by assessing intermediary results as progress toward the final assessment. These results would not necessarily be outcomes, but rather process indicators that show progress toward the desired outcomes.

## MEASUREMENTS AND INDICATORS<sup>2</sup>

Mark Miller shared the discussions of the breakout group on measurements and indicators, noting that participants discussed possible relevant outcomes to be measured, and measuring them from a population or individual perspective. The group named different types of indicators that could be used, including process indicators, such as measuring inputs and outputs; assessing management or operations of services; investment indicators, both financial and time-related, at national, local, and household levels; knowledge, attitude, and practice indicators; technical indicators; and indicators of coverage of service, particularly in vulnerable or marginalized populations.

Several participants in the group also described initiatives implemented in the Latin America and Caribbean (LAC) region that explore the measurement of outcomes. Marta Rubio-Codina described one initiative that enrolled 1,300 children from lower- and middle-income households and compared various measurement tools for precision. She explained that as more indicators are assessed, the accuracy of the tool increases, as does the cost. Miller queried whether an optimal tool could be developed that meets a standard of precision and usefulness but is still cost-effective. He also noted that Rubio-Codina and her colleagues are also exploring different tools with easy and quick quality indicators for policy makers for use in decision making.

Aimee Verdisco of the Inter-American Development Bank shared information about the development of a new instrument, validated in four countries in Latin America, that measures indicators for early childhood education. This work has led to a dialogue of these measures, as well

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<sup>2</sup> This section summarizes information presented by Mark Miller, National Institutes of Health.

as further exploration of population-based measures, cultural adaptation, and nationally representative samples. Four domains were being measured—cognition, language and communication, social and emotional skills, and motor skills in children 24 to 59 months of age.

Maureen Samms-Vaughn also discussed experiences in Jamaica, which has had many outcome measures in the health sector for early childhood, but not in education. She and her colleagues have introduced several measures using parental screening questionnaires, population-based surveys, and longitudinal data from birth cohorts. Finally, Miller stated, the group participants raised some questions about the connection between early childhood outcomes and long-term effects. Specifically, whether early childhood outcomes are predictors of the future, what role environmental factors play, and how to explore resilience-type factors.

### METHODOLOGY FOR MEASURING PUBLIC INVESTMENTS IN YOUNG CHILDREN<sup>3</sup>

Javier Curcio explained that participants in the third concurrent session discussed methodologies for measuring investment in early childhood, using an example of an exercise being implemented in nine countries in Latin America.<sup>4</sup> Curcio observed that the current system that connects problems of early childhood to state policies often does not incorporate analysis of the financial investments involved. This exercise complements analysis by considering the system with states' financial investments, and the methodology includes six variables:

1. The early childhood age group, up to age 7 years, including maternal health
2. Incorporation of the actions taken by countries at different government levels
3. Registration database that indicates adherence to public policies
4. Policy mapping of the functions of various sectors—social services, justice, protection of rights, and documentation of identity
5. Financial strength of types of expenditures and how they affect early childhood, and functional classification of these types of expenditures
6. Frequency of investment analysis

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<sup>3</sup> This section summarizes information presented by Javier Curcio, University of Buenos Aires (UBA) and General Sarmiento National University (UNGS).

<sup>4</sup> This exercise is coordinated by the Information System on Early Childhood in Latin America (SIPI) and UNICEF Regional Office for Latin America and the Caribbean in collaboration with nine UNICEF country offices.

Several questions were raised regarding this exercise, including how to make comparisons between different countries, how to make the process more adaptable to different contexts, how to sustain and institutionalize the process, and how to support each country's ownership. One participant noted the difficulty in mapping investment at the federal level in Brazil because the funds are often mixed across sectors—there is no clear picture of funding directly for early childhood. Another participant remarked that a group working in the Health Ministry is trying to study the methodology in order to examine all the investments in children's health. Lastly, a participant mused that while many variables are unique to country contexts, it could be possible to identify universal ones for comparison.

## 8

## A Way Forward<sup>1</sup>

At the close of the workshop, Constanza Alarcón provided final remarks in which she reflected on the key themes that were presented throughout the day. She began by reminding the audience of the key workshop objectives, listed below:

- Evidence of impact for effective models and their impact on public policies
- Scalability of program models, specifically, maintaining quality at scale and identifying context-related challenges
- Sustainability of programs
- Perspectives and experiences of governments in the implementation of a comprehensive national early childhood policy

Alarcón emphasized assessment as a key component to identifying effectiveness. Gathering quality information in follow-up assessment, she explained, stimulates public commitment to creating and implementing sustainable and effective public policy. Further, she argued for the importance of efficient and accurate data systems, recognizing that they need to include cross-sectoral data and different populations in order to advance the decision-making process.

With regards to the scalability of programs, Alarcón remarked that

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<sup>1</sup> This section summarizes information presented by Constanza Alarcón, Presidency of the Republic, Colombia.

it is crucial to build on existing infrastructures and available human resources, noting that creating something new and unknown requires paying attention to variables that can affect quality. Also, she noted that pilot projects can work for a given reality, but not necessarily in all contexts. She highlighted the need to adapt models to deliver services and programs in a given place and context while at the same time paying attention to variables that can affect quality.

As for how to sustain quality as programs are scaled up, Alarcón explained that it is necessary to identify specific program goals and criteria that can be scaled up through pilots. At the same time, it is necessary to encourage staff to support high quality through training, coaching, compensation, and shared experiences. Cost-effectiveness analysis for a given reality in a given region is crucial. However, work should be done to ensure that programs can be effective in other settings as they are scaled up. Challenges faced when scaling up should be considered as well, explained Alarcón, including supporting local governments in training and financing capacity building in municipalities and defining and monitoring quality standards, among others. She emphasized the importance of building local capacity and the benefits of working with leadership in local communities to provide monitoring and oversight. Moreover, she pointed out that program scalability and effectiveness can depend on whether the beneficiaries see the added value of the programs in their lives.

Regarding governance, Alarcón emphasized the need to view early childhood development through a holistic lens, and argued that the management of comprehensive care of young children is intersectoral in nature. Intersectoral approaches with efficient central coordination are successful in addressing problems and useful for promoting policies, Alarcón noted. She encouraged meetings at the local, regional, and global levels to elicit discussion and debates and to share experiences among policy makers. This, coupled with building techniques and creating tools to facilitate the development of policies, is an effective mechanism to mobilize governments, Alarcón argued.

Finally, Alarcón echoed several speakers in highlighting that investing in young children is more than investing in education. It includes health, nutrition, and social protection, as well as the development and education of accompanying parents and caregivers. She emphasized the need for more laws and policies to support strategies and a financial commitment for investing in early childhood development, explaining that these investments need to be sustainable in order to implement stronger policies and quality programs for the future.

## CLOSING REMARKS<sup>2</sup>

Closing the workshop, Eduardo Queiroz thanked the workshop presenters and participants, members of the forum, and supporters of early childhood development who have come together at a time when early childhood is at the forefront of policy in Latin America. Queiroz recognized that this event brought together people from different regions throughout Brazil, as well as many countries in Latin America, including Chile, Colombia, Honduras, Jamaica, and Uruguay. He also acknowledged the presence of supporters of early childhood from around the world, both at the workshop and online, and encouraged this community of regional and global stakeholders to participate in the upcoming forum activities.

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<sup>2</sup> This section summarizes the closing remarks presented by Eduardo Queiroz, Fundação Maria Cecília Souto Vidigal.



# Appendix A

## Acronyms

CCT	conditional cash transfer
CNPq	National Council for Scientific and Technological Development
DECIT	Ministry of Health's Department of Science and Technology
ECC	Early Childhood Commission
FMCSV	Fundação Maria Cecília Souto Vidigal
IOM	Institute of Medicine
iYCG	Forum on Investing in Young Children Globally
LAC	Latin America and Caribbean
NRC	National Research Council



# Appendix B

## Workshop Agenda

Forum on Investing in Young Children Globally (iYCG)  
Scaling Program Investments for Young Children Globally:  
Evidence from Latin America and the Caribbean

Joint Workshop with Fundação Maria Cecília Souto Vidigal  
São Paulo, Brazil  
Tuesday, November 11, 2014

### Workshop Objectives

Explore issues around scalability of program investments

1. Evidence of impact for effective models
2. Scalability of program models—how to maintain quality at scale, with a focus on approaches in culturally and ethnically diverse contexts and issues of decentralization, local capacity, and information systems for monitoring and evaluation
3. Sustainability of programs
4. Governance—perspectives and experiences of policy makers and ministers who have scaled up programs and worked toward implementing early childhood services into a comprehensive national policy

### Background Documents

- iYCG Workshop Summaries:
  - *The Cost of Inaction for Young Children Globally: Workshop Summary*
  - *Financing Investments in Young Children Globally: Workshop in Brief*

- *Financing Investments in Young Children Globally: Summary of a Joint Workshop by the Institute of Medicine, National Research Council, and The Centre for Early Childhood Education and Development, Ambedkar University, Delhi*

### **Planning Committee**

- Constanza Alarcón, Presidency of the Republic, Colombia  
(*Co-Chair*)
- Eduardo Queiroz, Fundação Maria Cecília Souto Vidigal  
(*Co-Chair*)
- Amina Abubakar Ali, Centre for Geographic Medicine Research—Kenya Medical Research Institute/Wellcome Trust Research Programme
- Raquel Bernal, Universidad de los Andes
- Florencia Lopez Boo, Inter-American Development Bank
- Joan Lombardi, Bernard van Leer Foundation
- Ruth Perou, U.S. Centers for Disease Control and Prevention
- Susan Walker, University of the West Indies

### **Maksoud Plaza Hotel Minas Gerais Room**

Alameda Campinas, 150 – 01404-900  
São Paulo, Brazil

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|----------------|---|
| <b>8:00 am</b> | <b>Networking Breakfast</b>   |
| <b>8:30 am</b> | <b>Welcome</b><br>Guilherme Gonçalves, President of the Board of Trustees,<br>Fundação Maria Cecília Souto Vidigal  |
| <b>8:40 am</b> | <b>Forum on Investing in Young Children Globally<br/>Overview</b><br>Zulfiqar A. Bhutta and Ann S. Masten, iYCG Co-Chairs   |
| <b>8:50 am</b> | <b>Workshop Goals and Objectives</b><br>Constanza Alarcón, Presidency of the Republic, Colombia,<br>and Workshop Co-Chair   |
| <b>9:00 am</b> | <b>Brazil Grand Challenges</b><br>Gary L. Darmstadt, The Bill & Melinda Gates Foundation<br>Claude Pirmez, Instituto Oswaldo Cruz<br>Dominique McMahon, Grand Challenges Canada<br>Eduardo Marino, Fundação Maria Cecília Souto Vidigal |

- 9:20 am**      **Keynote Address**  
Claudia Costin, World Bank
- 9:50 am**      **Responses to Keynote**  
Moderator: Joan Lombardi, Bernard van Leer Foundation
- 10:15 am**      **Session 1: Evidence of Impact for Effective Program Investments**  
*What is the evidence on cost-effective interventions? What are the challenges and barriers of scaling up pilots that have shown to be effective?*
- Susan Walker, University of the West Indies
  - Marta Rubio Codina, Institute for Fiscal Studies and Inter-American Development Bank
  - Mauricio L. Barreto, The Collective Health Institute, Federal University of Bahia
- Moderator: Raquel Bernal, Universidad de los Andes
- 11:30 am**      **Networking Break**
- 12:00 pm**      **Session 2: Scalability and Sustainability of Program Investments**  
*How to maintain quality at scale, with a focus on approaches in culturally and ethnically diverse contexts and issues of decentralization, local capacity, and information systems for monitoring and evaluation*
- Andrea Torres, Chile Crece Contigo
  - Liése Gomes Serpa, Primeira Infância Melhor
  - Paulo Bonilha, Ministry of Health, Brazil
- Moderator: Florencia Lopez Boo, Inter-American Development Bank
- 1:15 pm**      **Networking Lunch**
- 2:30 pm**      **Session 3: Perspectives on Governance**  
*Perspectives and experiences of policy makers and ministers who have scaled up programs and worked toward implementing early childhood services into a comprehensive national policy*
- Maureen Samms-Vaughan, Early Childhood Commission of Jamaica

- Ana Elisabeth de Andrade Lima, Government of Pernambuco in the Secretary of Health, Brazil
- Cristina Lustemberg, Uruguay Crece Contigo

Moderator: Constanza Alarcón, Presidency of the Republic, Colombia, and Workshop Co-Chair

**3:45 pm**      **Break**

**4:00 pm**      **Session 4: Breakout Session on Scaling and Sustainability**

A: Results-Based Financing (*Pernambuco Room*)  
 Martin Benavides Abanto, Group for the Analysis of Development  
 Ruth Perou, U.S. Centers for Disease Control and Prevention

B: Measurement/Indicators (*Parana Room*)  
 Aimee Verdisco, Inter-American Development Bank  
 Joan Lombardi, Bernard van Leer Foundation  
 Maureen Samms-Vaughan, Early Childhood Commission of Jamaica  
 Florencia Lopez Boo, Inter-American Development Bank

C: A Methodology of Measuring Public Investments in Young Children (*Minas Gerais Room*)  
 Javier Curcio, Universidad de Buenos Aires

**5:15 pm**      **Report Out and Discussion**  
 Moderator: Eduardo Queiroz, Fundação Maria Cecília Souto Vidigal, and Workshop Co-Chair

**5:45 pm**      **Final Remarks**  
 Constanza Alarcón, Presidency of the Republic, Colombia, and Workshop Co-Chair

**6:00 pm**      **Adjourn**  
 Eduardo Queiroz, Fundação Maria Cecília Souto Vidigal, and Workshop Co-Chair

## Appendix C

### Biographical Sketches of Workshop Speakers

**Martín Benavides Abanto, Ph.D.**, was the Executive Director at the research center GRADE and led the institution in the first round of the Think Tank Initiative. He also served on the Steering Committee of two global initiatives: Southern Voice and a Network of Latin-American Centers (ILAIPP). He is now a Senior Researcher at GRADE. He also works as a Professor in the Department of Social Science at Pontifical Catholic University, where he is a member of the Faculty Council and the Advisory Committee of Graduate Programs in Sociology. He has published on topics such as violence, education, inequalities, and youth.

He served as a Fellow at the Center for Advanced Studies in Behavioral Sciences at Stanford University during the 2007–2008 academic year and as an Affiliated Researcher at the Stanford Center for the Study of Poverty and Inequality. He has been working on several projects for Ford Foundation, Bernard van Leer Foundation, International Development Research Center (IDRC), Inter-American Development Bank (IADB), and the World Bank. He has a Ph.D. in Sociology from Pennsylvania State University where he also attained a master's degree in Education Policy.

**Constanza Alarcón, Ph.D.**, a Colombian expert on childhood and adolescent public policies design and implementation, with special focus on early childhood, works in the Presidency of the Republic of Colombia as the National Coordinator of the Intersectoral Commission for Early Childhood. From the Presidency of the Republic of Colombia she has led the design and implementation process of an innovative public policy,

in terms of integrality and intersectorality, for the early childhood in her country.

Through her extended career, Dr. Alarcón has made an important contribution in the area of early childhood and childhood, from academic, public, and private areas in her country. As a recognized leader in her country and Latin America, Dr. Alarcón brings an enriching perspective built on her experience as the former Deputy Secretary for Childhood in Bogotá, Colombia. Being part of national and international, public, and private organizations, Dr. Alarcón has led several social development projects, including the planning, implementation, and evaluation of public policies, intersectoral and interinstitutional coordination, as well as designing and managing public–private partnerships in the social area.

Prior to her work as Deputy for Childhood, Dr. Alarcón was a United Nations Organization policy advisor on social organizations strengthening to the Office of the Mayor of Bogotá. In the academic sector, she served as Dean and Professor in several schools of education in various universities in Colombia. She also coordinated protection, adoption, and care programs for people with disabilities.

Dr. Alarcón is a psychologist from Colombian National University. She holds a specialization degree on Social Comprehensive Attention in Mental Health, and took a master's in Educational and Social Development.

**Mauricio L. Barreto, M.P.H., M.D., Ph.D.**, is a doctor (UFBa) and earned his Ph.D. in Epidemiology from the University of London. He is a Professor in the postgraduate program of Collective Health at UFBa and Honorary Professor at the London School of Hygiene and Tropical Medicine. He is a 1-A Researcher of CNPq and a Member of the Brazilian Academy of Sciences (ABC) and of the World Academy of Sciences (TWAS). His scientific interests include the role of social and public policy (Family Health Program and Bolsa Familia) in the development, morbidity, and mortality of children.

**Raquel Bernal, Ph.D.**, is an Associate Professor and Director of the Center for Research on Economic Development in the Economics Department at Universidad de los Andes in Bogotá, Colombia. She worked as an assistant professor at Northwestern University (Evanston, Illinois) between 2003 and 2007 prior to moving to Colombia. Her recent research focuses on the determinants of an individual's performance in the labor market and in particular, the determinants of ability at early stages of life. Current research projects include the study of the effects of women's employment and childcare choices on children's cognitive ability as well as estimation of the effects of childcare quality and parents' specific time allocations on children's development. She has also worked in the evaluation of a wide

variety of early childhood development programs in Colombia for which she has assessed more than 35,000 children and successfully worked jointly with the government in improving and innovating in ECD policy design. Dr. Bernal holds a Ph.D. in Economics from New York University and received her M.A. and B.A. degrees from Universidad de Los Andes.

**Zulfiqar A. Bhutta, MBBS, FRCPC, FAAP, Ph.D.** (*Forum Co-Chair*), is the Robert Harding Inaugural Chair in Global Child Health at the Hospital for Sick Children, Toronto; the Co-director of the SickKids Center for Global Child Health; and the Founding Director of the Center of Excellence in Women and Child Health, at the Aga Khan University, unique joint appointments. He also holds adjunct professorships at the Schools of Public Health at Johns Hopkins University (Baltimore), Tufts University (Boston), University of Alberta, and the London School of Hygiene & Tropical Medicine. He is a designated Distinguished National Professor of the Government of Pakistan and was the Founding Chairman of the National Research Ethics Committee of the Government of Pakistan from 2002–2014.

Dr. Bhutta's research interests include newborn and child survival, maternal and child undernutrition, and micronutrient deficiencies. Dr. Bhutta is one of the seven-member Independent Expert Review Group (iERG) established by the United Nations Secretary General in September 2011 for monitoring global progress in maternal and child health MDGs. He represents the global academic and research organizations on the Global Alliance for Vaccines and Immunizations (GAVI) Board, is the Co-Chair of the Maternal and Child Health oversight committee of the Eastern Mediterranean Regional Office (EMRO) of the World Health Organization (WHO) as well as the Global Countdown for 2015 Steering Group. He has served as a member of the Global Advisory Committee for Health Research for the WHO, the Board of Child & Health and Nutrition Initiative of Global Forum for Health Research, and was a founding board member of the Global Partnership for Maternal, Newborn and Child Health (PMNCH). He serves on several international editorial boards. Dr. Bhutta is currently a member of the WHO Strategic Advisory Committee for Vaccines (SAGE), the Expert Advisory Group for Vaccine Research, the Advisory Committee for Health Research of WHO EMRO, and a Co-Chair of its apex Regional Committee for Maternal and Child Health. He has won several awards, including the Aga Khan University Awards for Research (2005), Distinguished Faculty (2012), and the WHO Family Health Award (2014). Dr. Bhutta received his Ph.D. from the Karolinska Institute, Sweden, and is a Fellow of the Royal College of Paediatrics & Child Health, American Academy of Pediatrics, and the Pakistan Academy of Sciences.

**Paulo Bonilha** graduated from Faculdade de Ciências Médicas (FCM) da Universidade Estadual de Campinas (UNICAMP). He received his master's degree in child and adolescent health in the Department of Pediatrics of the FCM-UNICAMP. He is currently General Coordinator of child health and breastfeeding in the Ministry of Health, Brazil.

**Florencia Lopez Boo, Ph.D.**, is a senior social protection economist with the Social Protection and Health Division of the Inter-American Development Bank (IADB). Her previous positions include working at the IADB Research Department, the World Bank, the OPHI Institute in Oxford's Department of International Development, as well as teaching at the University of Oxford and the University of Louvain-la-Neuve.

Her work focuses on early childhood development and evaluation of the impact of social protection programs in various Latin-American countries. Most of her current work includes projects and evaluations to inform scalable approaches to parenting interventions. Other research includes work on the measurement of quality in childcare settings for very young children. She received a Ph.D. in economics from the University of Oxford and a master's degree from the University of Namur (Belgium). Her work has been published in peer-reviewed journals such as the *Journal of Human Resources*, *Economic Letters*, the *New York Academy of Sciences*, the *Journal of Development Studies*, and the *Cambridge Journal of Economics*. She is also the author and co-author of books and chapters on education and early childhood development in Latin America and the Caribbean. Dr. Lopez Boo is a native of Argentina, and she is also a research fellow at the Institute for the Study of Labor (IZA) and member of the 2015 *Lancet* series on Child Development Steering Committee.

**Claudia Costin, Ph.D.**, a Brazilian national, joined the World Bank Group in July 2014. Prior to this, she was Secretary of Education, Rio de Janeiro. Under her stewardship, learning results rose by 22 percent in the city. She also implemented a strong Early Childhood program, working seamlessly across sectors with the Health and Social Protection secretariats. Dr. Costin has been vice-president of the Victor Civita Foundation, dedicated to raising public education quality. Believing in the transformational power of education, she helped create the civil society movement *Todos pela Educação*, also serving on its technical committee. Convinced that teacher motivation is critical for real learning, Dr. Costin communicates with thousands of teachers using social media.

Her former positions include Secretary of Culture, São Paulo State and Federal Minister, Public Administration and State Reform. She has also served as Executive Secretary, Helio Beltrao Institute and CEO, Promon Intelligens. Earlier, she served as World Bank Sector Manager, Poverty

Reduction and Economic Management, Latin America and the Caribbean, and she has also advised several African governments on public policy and state modernization.

Dr. Costin has held academic positions at the Catholic University of São Paulo, Getúlio Vargas Foundation, INSPER Institute of Education and Research, and École Nationale d'Administration Publique in Québec. She has a master's degree in Economics from the Escola de Administracao de Empresas de São Paulo of the Fundação Getúlio Vargas.

**Javier A. Curcio** has a graduate degree in economics from the University of Buenos Aires (UBA) with a specialization in the monitoring and evaluation of public policy, health economics, education, and fiscal policy. He is a Research Professor at the Institute of Sciences and the Urban Institute at the National University of General Sarmiento (UNGS), and Associate Professor of Public Finance in the undergraduate Economics program of UBA. He lectures in the following graduate programs: master's of Economics (UBA); master's in design and management of social policies and programs (Latin American Faculty of Social Sciences [FLACSO]); and master's of Public Health at the "Juan Lazarte" Institute of the National University of Rosario, among others. He worked in UNICEF as a specialist in Social Investment and is a consultant to a number of international agencies, such as UNICEF; Economic Commission for Latin America and the Caribbean (ECLAC); Joint United Nations Programme on HIV/AIDS (UNAIDS); United Nations Development Programme (UNDP); United Nations Educational, Scientific, and Cultural Organization (UNESCO); the World Bank; and the Inter-American Development Bank. He had also been a government adviser in Argentina and other Latin-American countries in various fields and has numerous publications.

**Gary L. Darmstadt, M.D., M.S.,** is Associate Dean for Maternal and Child Health, Professor in the Division of Neonatal and Developmental Pediatrics, and Co-director of Global Pediatric Health in the Department of Pediatrics at the Stanford University School of Medicine. Previously Dr. Darmstadt was Senior Fellow in the Global Development Program at The Bill & Melinda Gates Foundation (BMGF), where he led a cross-foundation initiative on Women, Girls and Gender, assessing how addressing gender inequalities and empowering women and girls leads to improved gender equality as well as improved health and development outcomes. Prior to this role, he served as BMGF Director of Family Health, leading strategy development and implementation across nutrition, family planning, and maternal, newborn, and child health.

Dr. Darmstadt was formerly Associate Professor and Founding Director of the International Center for Advancing Neonatal Health in the

Department of International Health at the Johns Hopkins Bloomberg School of Public Health. He has trained in Pediatrics at Johns Hopkins University, in Dermatology at Stanford University, and in Pediatric Infectious Disease as a fellow at the University of Washington, Seattle, where he was Assistant Professor in the Departments of Pediatrics and Medicine. Dr. Darmstadt left the University of Washington to serve as Senior Research Advisor for the Saving Newborn Lives program of Save the Children-US, where he led the development and implementation of the global research strategy for newborn health and survival, before joining Johns Hopkins.

**Ana Elizabeth de Andrade Lima, M.P.H.**, is the Executive Committee Coordinator for the Mãe Coruja Pernambucana Program and General Director of Care Management and Strategic policies for the State Health Secretariat of Pernambuco. She received her master's degree in Public Health from the University of Leeds-England. She also is a specialist in family and community medicine at the University of Pernambuco and a doctor, having graduated from the Federal University of Rio de Janeiro. She is a member of the Associação Pernambucana de Medicina de Família e Comunidade (APEMFC); Brazilian Society of Family and Community Medicine (SBMFC); the National Network of Early Childhood (RNPI); State Network of Early Childhood (REPI); committee member of Early Childhood Project Riverside (PIR); member of the Committee of Experts and of the Ministry of Health Social mobilization for the Integral Development of Early Childhood; and the Technical Chamber of Primary Attention of Health–National Council of Secretaries of Health (CONASS).

**Joan Lombardi, Ph.D.**, is an international expert on child development and social policy. She currently serves as Senior Advisor to the Buffett Early Childhood Fund on national initiatives and to the Bernard van Leer Foundation on global child development strategies. She also directs Early Opportunities, LLC, focusing on innovation, policy, and philanthropy. Over the past 40 years, Dr. Lombardi has made significant contributions in the areas of child and family policy as an innovative leader and policy advisor to national and international organizations and foundations and as a public servant. She served in the U.S. Department of Health and Human Services as the first Deputy Assistant Secretary for Early Childhood Development (2009–2011) in the Obama administration, and as the Deputy Assistant Secretary for Policy and External Affairs in the Administration for Children and Families and the first Commissioner of the Child Care Bureau among other positions (1993–1998) during the Clinton administration. Outside of public service, she served as the founding chair of the Birth to Five Policy Alliance (now the Alliance for Early

Success) and as the founder of Global Leaders for Young Children. She currently serves on the Board of Trustees for Save the Children and the Board of Directors for the Collaborative for Academic, Social, and Emotional Learning.

**Cristina Lustemberg, M.D.**, a pediatrician, received her medical degree from Universidad de la Republica Uruguay (UDELAR). Since January 2012, she has been the coordinator for Programa Uruguay Crece Contigo with the Presidency of the Republic. From 2005 to 2011, she served in the public sector as head of Niñez y Adolescencia de Administración of State Health Services. Dr. Lustemberg is involved in the Comité de Coordinación Estratégica de Políticas de Infancia y Adolescencia with active participation in the National Strategy for Children and Adolescents 2010–2030 (ENIA).

**Eduardo Marino, M.B.A.**, is the Manager of Evaluation and Research at Fundação Maria Cecília Souto Vidigal in São Paulo, Brazil. He earned his master's degree in Business Administration from the University of São Paulo, and holds a B.Sc. in Animal Production from the State University of São Paulo. As an evaluator of social programs, he has extensive experience in research and program evaluation in the areas of sustainability, environmental conservation, and early child development.

**Ann S. Masten, Ph.D., LP** (*Forum Co-Chair*), is Regents Professor, Irving B. Harris Professor of Child Development, and Distinguished McKnight University Professor in the Institute of Child Development at the University of Minnesota. She completed her doctoral training at the University of Minnesota in clinical psychology and her internship at University of California, Los Angeles. In 1986, she joined the faculty in the Institute of Child Development at the University of Minnesota, serving as chair of the department from 1999 to 2005. Dr. Masten's research focuses on understanding processes that promote competence and prevent problems in human development, with a focus on adaptive processes and pathways, developmental tasks and cascades, and resilience in the context of high cumulative risk, adversity, and trauma.

She directs the Project Competence studies of risk and resilience, including studies of normative populations and high-risk young people exposed to war, natural disasters, poverty, homelessness, and migration. The ultimate objective of her research is to inform sciences, practices, and policies that aim to promote positive development and a better future for children and families whose lives are threatened by adversity. Dr. Masten currently serves on the Board on Children, Youth, and Families (BCYF) and the U.S. National Committee of Psychology for the Insti-

tute of Medicine/National Academies. She formerly served on the BCYF Committee on the Impact of Mobility and Change on the Lives of Young Children, Schools, and Neighborhoods, and the planning committee on Investing in Young Children Globally. She also has served as President of the Society for Research in Child Development and President of Division 7 (Developmental) of the American Psychological Association (APA). She is a 2014 recipient of the Urie Bronfenbrenner Award for Lifetime Contributions to Developmental Psychology in the Service of Science and Society from APA. Dr. Masten has published and presented extensively on the themes of risk and resilience in human development. Her book *Ordinary Magic: Resilience in Children* was published by Guilford Press, and she has been teaching a free MOOC (mass open online course) on the same theme since September 2014 on Coursera.

**Dominique McMahon, Ph.D.**, is a Program Officer with Grand Challenges Canada for the Targeted Grand Challenges program. Dr. McMahon primarily supports the Saving Brains program, as well as the development and implementation of other Grand Challenges Canada initiatives. Dr. McMahon has interdisciplinary experience in innovation in the developing world that spans both the medical sciences and social sciences. Prior to joining Grand Challenges Canada, Dr. McMahon completed a Ph.D. in Medical Sciences at the University of Toronto examining biomedical innovation capacity in Brazil, China, and India. She then completed post-doctoral fellowships in Public Health and in Global Affairs on domestic clinical research capacity in the emerging economies. Dr. McMahon is currently a Research Fellow at the Munk Center for Global Affairs at the University of Toronto.

**Ruth Perou, Ph.D.**, is the Team Leader of the Child Development Studies Team at the National Center on Birth Defects and Developmental Disabilities at the U.S. Centers for Disease Control and Prevention (CDC), National Center on Birth Defects and Developmental Disabilities. Dr. Perou is working on implementing CDC's public health research agendas in children's mental health, including attention-deficit/hyperactivity disorder and Tourette's syndrome and related comorbidities. She is the Project Director of Legacy for Children, CDC's national program to promote optimal child development outcomes in low-income families. Dr. Perou represents CDC on multiple federal workgroups on child development and children's mental health. She is the CDC liaison to the Carter Center Mental Health Task Force. Her current research interest and expertise are in prevention, early childhood education, early intervention, and promotion of children's mental health. Dr. Perou received her Ph.D. in Applied

Developmental Psychology from the University of Miami in Coral Gables, Florida.

**Claude Pirmez, Ph.D.**, graduated in medicine in 1979 and completed her medical residency in Pathology at the Federal University of Rio de Janeiro (UFRJ). She obtained her master's degree in Medicine (UFRJ 1986) and her Ph.D. in Immunology in collaboration with the University of Southern California. She completed two post-doctorates in Germany, one at the Tropical Institute of Hamburg and the other at the Robert Koch Institute in Berlin. She also has an M.B.A. She began working at Fiocruz in 1986. Her scientific experience is mainly in the field of immunopathology of infectious diseases, and she has published more than 70 papers in the field.

Dr. Pirmez is now advisor to the Presidency and a Senior Researcher at Fiocruz. During these years, she has held the following positions: head of the Laboratory of Immunopathology (1992–2000), head of the Department of Biochemistry & Molecular Biology (2000–2003), vice-director of the Oswaldo Cruz Institute (2005–2008), and Vice-President of Research (2009–2013). Currently, she is also managing the projects of the Grand Challenges Brazil Reducing the Burden of Preterm Birth.

**Eduardo de Campos Queiroz, M.P.A.**, is the CEO of Fundação Maria Cecilia Souto Vidigal (FMCSV). FMCSV is a Brazilian family foundation founded in 1965 that focuses on the generation and dissemination of the importance of investing in early childhood development. He currently serves as a board member of the United Way Brazil, Ensino Social Profissionalizante (ESPRO), and Outward Bound Brazil. His previous positions include working as an Advisor to the Secretary of Education of the State of São Paulo, and Executive Director of Outward Bound Mexico and Brazil. Earlier in his career he worked as an investment banker as a currency trader for approximately 11 years. Mr. Queiroz has a bachelor's degree in Business Administration with a specialization in Business from Getúlio Vargas Foundation and a master of public administration degree from the Harvard Kennedy School of Government (Mason and Lemann Fellow).

**Marta Rubio-Codina, Ph.D.**, is a Senior Research Economist in the Centre for Evaluation of Development Policy at the Institute for Fiscal Studies in London. She is currently on leave at the Social Protection and Health Division of the Inter-American Development Bank in Washington, DC. She holds a Ph.D. in Economics from the University of Toulouse. Her research interests revolve around poverty alleviation and the promotion of human capital, particularly in the early years. She has been extensively involved in the design, implementation, and evaluation of large-scale psychosocial stimulation home visiting interventions in Colombia, India,

and Peru; and is currently supporting the design and evaluation of group interventions in Colombia, India, and Mexico. Dr. Rubio-Codina is also very interested in measurement issues; she has led a research project in Bogotá aimed to identify cost-efficient instruments to measure early childhood development outcomes in children less than 42 months for use in large-scale evaluations. Dr. Rubio-Codina also has extensive experience in the evaluation of social and educational government programs in Latin American, including the Mexican Conditional Cash Transfer program. Her research has been published in peer-reviewed journals, including the *British Medical Journal*, the *Journal of Development Economics*, and the *American Economic Journal*.

**Maureen Samms-Vaughan, Ph.D.**, is known locally, regionally, and internationally for her seminal research, clinical work, and policy development in the field of child health, development, and behavior. She is recognized as an advocate for all children, but particularly those at the early childhood level and those with disabilities. She was appointed the University of the West Indies' first Professor of Child Health, Child Development and Behaviour in 2006, subsequent to previous academic appointments since 1993. In 2003, she was appointed the first Chairman of the Early Childhood Commission (ECC), a body established by the Government of Jamaica to develop the country's early childhood sector. Under her leadership, the ECC developed and implemented Jamaica's first cross-sectoral National Strategic Plan for Early Childhood Development (ECD). This plan has been recognized as an international model. She has guided the development of Jamaica's National Parenting Policy and is currently coordinating the development of Jamaica's ECD Policy. Dr. Samms-Vaughan has more than 50 publications in child health and development. She has undertaken consultancies in child development for the Inter-American Development Bank (IADB), the World Bank, UNICEF, and Pan American Health Organization (PAHO). She is currently a member of the IADB's Advisory Group on Early Childhood Development.

**Andrea Torres Sansotta** is a Social Worker from the Pontifical Catholic University of Valparaíso, Chile. She has a diploma in Public Management from University of Chile. She worked for more than 15 years in the public sector of Chile. She was the national coordinator of Housing Program for "Chile Solidario System" (Fund of Solidarity and Social Investment, FOSIS). Also, she was the National Coordinator of the Biopsychosocial Development Support Program and the Newborn Support Program for the Ministry of Planning in Chile. Between 2009 and 2012 she was the National Coordinator of the Comprehensive Protection System for Early Childhood called "Chile Crece Contigo." She has been an international

consultant in public policy management in early childhood development for the World Bank and the Inter-American Development Bank. She came back to the National Coordination of “Chile Crece Contigo” in the Ministry of Social Development.

**Liése Gomes Serpa** is a Sociologist, Art-Educator, Consultant, and Coordinator of the Primeira Infância Melhor (PIM) Program. She is a facilitator and panelist of Art Education courses and Environmental Education, as well as on the methodology of PIM. Her priority projects developed by the state of Rio Grande do Sul, Brasil, include the Stork program, Primeira Infância Melhor, and the Strengthening of Primary Care. Ms. Gomes Serpa earned her M.A. in Collective Health.

**Aimee Verdisco, Ph.D.**, entered the Inter-American Development Bank in September 2001. Since October 2011, she has been a Lead Specialist in the Education Division, located in the Bank’s office in Bolivia, where she holds responsibility for the execution of large-scale education operations in the country. She also leads a regional project on child development indicators (PRIDI) and provides technical assistances to various operations throughout the region. She has worked on loan operations in most all Bank member countries and undertaken analytical work on topics related to education and early childhood development. She is the author of peer-reviewed articles, book chapters, institutional reports, and a book on how to improve the performance of education systems in the region.

**Susan Walker, Ph.D.**, joined the Tropical Metabolism Research Unit (TMRU), University of the West Indies (UWI), in 1985 after receiving a Ph.D. from the University of London, United Kingdom. Dr. Walker’s main research interests are the effects of early life experiences, including nutrition, health, and psychosocial factors, on children’s development and behavior, and the design and evaluation of sustainable interventions to improve children’s cognitive and behavioral outcomes. Her current work includes projects to inform and develop scalable approaches to parenting interventions. Other research includes evaluation of interventions to promote social and emotional competence in young children to prevent later aggressive behavior. Dr. Walker was appointed Senior Lecturer in 1995 and Professor of Nutrition in the Epidemiology Research Unit, Tropical Medicine Research Institute (TMRI) in 1999. She leads the Child Development Research Group within the TMRI and was appointed Director of the TMRI in 2012. She received the Vice Chancellor’s Award for Excellence in Research in 2007. Through her research, Dr. Walker has demonstrated that a home visiting stimulation program has sustained benefits for undernourished children’s cognitive ability, education, and emotional

well-being through age 22 years. The program, delivered by community health aides, aims to improve mother–child interaction, as well as increase stimulation and play. She and her group have also demonstrated that this intervention can be successfully integrated into existing health services. This work has been used by several agencies to demonstrate the need to integrate child development services into nutrition and health programs. Dr. Walker is a member of the Global Child Development Group, which promotes research on child development in developing countries and translation of research to policy.